THE LIVING AGE.

SEVENTH SERIES | VOLUME XXVIII.

BOOKS AND AUTHORS

No. 3194 - Sept 23, 1905.

Vol. CCXLVI.

CONTENTS.

ı.	Evolutionary Speculation. By Professor G. H. Darwin, Ph.D. Inaugural Address at the meeting of the British Association for the	
	Advancement of Science. Part I NATURE	771
II.	With the Mehtar's Falcons: A Morning in Chitral. By R. L.	
	Kennion BLACKWOOD'S MAGAZINE	780
III.	Peter's Mother. Chapter VI. By Mrs. Henry de la Pasture	
	(To be continued.)	786
IV.	The Dramatic Element in Dickens. By Isabelle M. Pagan.	
	DICKENSIAN	791
v.	Vanishing Vienna: A Retrospect. By Lady Paget.	
	NINETEENTH CENTURY AND AFTER	795
VI.	A Classical Education. By Arthur C. Benson.	
	MACMILLAN'S MAGAZINE	806
VII.	The Legend of Rodderburg. By Francis E. Romanes.	-
	TEMPLE BAR	812
VIII.	The Peace SPECTATOR	816
IX.	The Development of Character in Fiction. By A. ACADEMY	819
x.	The Child and Religion: Scientific Method in Religious Train-	3
	ing. By Professor James Sully SPEAKER	821
XI.	Is Any Animal Greedler Than Man? By F. G. Aftalo.	
	PALL MALL MAGAZINE	824
	A PAGE OF VERSE.	
XII.	Days and Nights. By T. Sturge Moore THE SPEAKER	770
	"The Angelus." By Ian Malcolm PALL MALL MAGAZINE	
XIII.	The Builders. A London Vision. By Laurence Binyon.	110
XIV.	SATURDAY REVIEW	770
	SATURDAL REVIEW	



PUBLISHED EVERY SATURDAY BY

THE LIVING AGE COMPANY,

6 BEACON STREET, BOSTON.

TERMS OF SUBSCRIPTION.

FOR SIX DOLLARS remitted directly to the Publishers, THE LIVING AGE will be punctually forwarded for a year, free of postage, to any part of the U. S. or Canada.

Postage to foreign countries in U. P. U. is 3 cents per copy or \$1.56 per annum.

Remittances should be made by bank draft or check, or by post-office money order, if possible. If neither of these can be procured, the money should be sent in a registered letter. All postmasters are obliged to register letters when requested to do so. Drafts, checks, and money orders should be made payable to the order of THE LIVING AGE Co.

Single copies of THE LIVING AGE, 15 cents.

DAYS AND NIGHTS.

Like a king from a sunrise land, In fair ship sailing,

With banners salt winds expand And pennons trailing,

With wealth untold and a mind unknown,

And a power to love and make friends of his own,

And a power to leave those he likes not alone,

Each new day comes to me— Like king from far east sailing Over the sea.

In a barge with golden trappings For queen prepared,

And against the cold rich wrappings And furs deep-haired,

To lands afar, by a force unguessed. Where the face reveals what hides in the breast

And by doubt of another no heart is distressed.

Some nights have carried me. Like queen that homeward fared Over the sea.

O heart be true and strong, That worth make thee each day's

best friend,
Then thou the hours of dark shalt spend

Out there where is no wrong.

T. Sturge Moore.

The Speaker.

"THE ANGELUS."

Across the fields the Vespers send
Their solemn call to prayer and praise;
Then, wearily, the Beapers wend
Them homeward in the sunset rays:
And all things living unite in giving
Thanks for the Sun, for labor done,
To God who counts their days.

The stars shed tears of diamond dew Upon the darkened earth beneath; The nightingales their notes renew, Inspired by day's departing breath;

Till Sleep all-healing, and softly stealing

Over this life of joy and strife, Brings balm in guise of Death. And thus we pass: a pilgrim band Journeying down Life's ordered road, From Sunrise into Shadow-land; Each bearing his appointed load Towards the goal of each man's soul.

Until the end, when all shall bend Before the Throne of God.

Ian Malcolm.

Pall Mall Magazine.

THE BUILDERS.

A London Vision.

Staggering slowly, and swaying Heavily at each slow foot's lift and drag,

With tense eyes careless of the roar and throng

That under jut and jag

Of half-built wall and scaffold streams along,

Six bowed men straining strong Bear, hardly lifted, a huge lintel stone.

This ignorant thing and prone,
Mere numbness, blindly weighing.

A brute piece of blank death, a bone
Of the stark mountain, helpless and
inert,

Yet draws each sinew till the hot veins swell

And sweat-drops upon hand and forehead start,

Till with short pants the suffering heart

Throbs to the throat, where fiercely hurt

Crushed shoulders cannot heave; till thought and sense

Are nerved and narrowed to one aim intense,

One effort scarce to be supported longer!

What tyrant will in man or God were stronger

To summon, thrall and seize

The exaction of life's uttermost resource

That from the down-weighed breast and aching knees

To arms lifted in pain

And hands that grapple and strain Upsurges, thrusting desperate to repel The pressure and the force

Of this, which neither feels, nor hears, nor sees?

Laurence Binyon.

The Saturday Review.

EVOLUTIONARY SPECULATION.*

PART I.

Bartholomeu Diaz, the discoverer of the Cape of Storms, spent sixteen months on his voyage, and the little flotilla of Vasco da Gama, sailing from Lisbon on July 8, 1497, only reached the Cape in the middle of November. These bold men, sailing in their puny fishing smacks to unknown lands, met the perils of the sea and the attacks of savages with equal courage. great was the danger of such a voyage may be gathered from the fact that less than half the men who sailed with da Gama lived to return to Lisbon. Four hundred and eight years have passed since that voyage, and a ship of 13.000 tons has just brought us here, in safety and luxury, in but little more than a fortnight.

How striking are the contrasts presented by these events! On the one hand compare the courage, the endurance, and the persistence of the early navigators with the little that has been demanded of us; on the other hand consider how much man's power over the forces of nature has been augmented during the past four centuries. The capacity for heroism is probably undiminished, but certainly the occasions are now rarer when it is demanded of us. If we are heroes, at least but few of us ever find it out, and, when we read stories of ancient feats of courage, it is hard to prevent an uneasy thought that, notwithstanding our boasted mechanical inventions, we are perhaps degenerate descendants of our great predecessors.

Yet the thought that to-day is less

* Inaugural address by Prof. G. H. Darwin, M.A., L.L.D., Ph.D., F.R.S., President of the British Association for the Advancement of Science, at the meeting of the Association at Capetown, August 15. romantic and less heroic than yesterday has its consolation, for it means that the lot of man is easier than it was. Mankind, indeed, may be justly proud that this improvement has been due to the successive efforts of each generation to add to the heritage of knowledge handed down to it by its predecessors, whereby we have been born to the accumulated endowment of centuries of genius and labor.

I am told that in the United States the phrase "I want to know" has lost the simple meaning implied by the words, and has become a mere exclamation of surprise. Such a conventional expression could hardly have gained currency except amongst a people who aspire to knowledge. dominance of the European race in America, Australasia, and South Africa has no doubt arisen from many causes, but amongst these perhaps the chief one is that not only do "we want to know," but also that we are determined to find out. And now within the last quarter of a century we have welcomed into the ranks of those who "want to know" an oriental race, which has already proved itself strong in the peaceful arts of knowledge.

I take it, then, that you have invited us because you want to know what is worth knowing; and we are here because we want to know you, to learn what you have to tell us, and to see that South Africa of which we have heard so much.

The hospitality which you are offering us is so lavish, and the journeys which you have organized are so extensive, that the cynical observer might be tempted to describe our meeting as the largest picnic on record. Although we intend to enjoy our picnic with all our hearts, yet I should like to tell the

cynic, if he is here, that perhaps the most important object of these conferences is the opportunity they afford for personal intercourse between men of like minds who live at the remotest corners of the earth.

We shall pass through your land with the speed and the voracity of a flight of locusts; but, unlike the locust, we shall, I hope, leave behind us permanent fertilization in the form of stimulated scientific and educational ac-And this result will ensue tivity. whether or not we who have come from Europe are able worthily to sustain the lofty part of prophets of sci-We shall try our best to play to ence. your satisfaction on the great stage upon which you call on us to act, and if when we are gone you shall, amongst yourselves, pronounce the performance a poor one, yet the fact will remain, that this meeting has embodied in a material form the desire that the progress of this great continent shall not be merely material; and such an aspiration secures its own fulfilment. However small may be the tangible results of our meeting, we shall always be proud to have been associated with you in your efforts for the advancement of science.

We do not know whether the last hundred years will be regarded for ever as the saeculum mirabile of discovery, or whether it is but the prelude to yet more marvellous centuries. To us living men, who scarcely pass a year of our lives without witnessing some new marvel of discovery or invention, the rate at which the development of knowledge proceeds is truly astonishing; but from a wider point of view the scale of time is relatively unimportant, for the universe is leisurely in its procedure. Whether the changes which we witness be fast or slow, they form a part of a long sequence of events which begin in some past of immeasurable remoteness and tend to

some end which we cannot foresee. must always be profoundly interesting to the mind of man to trace successive cause and effect in the chain of events which make up the history of the earth and all that lives on it, and to speculate on the origin and future fate of animals, and of planets, suns, and stars. I shall try, then, to set forth in my address some of the attempts which have been made to formulate evolutionary speculation. This choice of a subject has, moreover, been almost forced on me by the scope of my own scientific work, and it is, I think, justified by the name which I bear. It will be my fault and your misfortune if I fail to convey to you some part of the interest which is naturally inherent in such researches.

The man who propounds a theory of evolution is attempting to reconstruct the history of the past by means of the circumstantial evidence afforded by the present. The historian of man, on the other hand, has the advantage over the evolutionist in that he has the written records of the past on which to rely. The discrimination of the truth from amongst discordant records is frequently a work demanding the highest qualities of judgment; yet when this end is attained it remains for the historian to convert the arid skeleton of facts into a living whole by clothing it with the flesh of human motives and impulses. For this part of his task he needs much of that power of entering into the spirit of other men's lives which goes to the making of a poet. Thus the historian should possess not only the patience of the man of science in the analysis of facts, but also the imagination of the poet to grasp what the facts have meant. Such a combination is rarely to be found in equal perfection on both sides, and it would not be hard to analyze the works of great historians so as to see which quality was predominant in each of them.

The evolutionist is spared the surpassing difficulty of the human element, yet he also needs imagination, although of a different character from that of the historian. In its lowest form his imagination is that of the detective who reconstructs the story of a crime; in its highest it demands the power of breaking lose from all the trammels of convention and education, and of imagining something which has never occurred to the mind of man before. In every case the evolutionist must form a theory for the facts before him, and the great theorist is only to be distinguished from the fantastic fool by the sobriety of his judgment-a distinction, however, sufficient to make one rare and the other only too common.

The test of a scientific theory lies in the number of facts which it groups into a connected whole; it ought besides to be fruitful in pointing the way to the discovery and co-ordination of new and previously unsuspected facts. Thus a good theory is in effect a cyclopædia of knowledge, susceptible of indefinite extension by the addition of supplementary volumes.

Hardly any theory is all true, and many are not all false. A theory may be essentially at fault and yet point the way to truth, and so justify its We should not, temporary existence. therefore, totally reject one or other of two rival theories on the ground that they seem, with our present knowledge, mutually inconsistent, for it is likely that both may contain important elements of truth. The theories of which I shall have to speak hereafter may often appear discordant with one another according to our present lights. Yet we must not scruple to pursue the several divergent lines of thought to their logical conclusions, relying on future discovery to eliminate the false and to reconcile together the truths which form part of each of them.

In the mouths of the unscientific evo-

lution is often spoken of as almost synonymous with the evolution of the various species of animals on the earth, and this again is sometimes thought to be practically the same thing as the theory of natural selection. Of course those who are conversant with the history of scientific ideas are aware that a belief in the gradual and orderly transformation of nature, both animate and inanimate, is of great antiquity.

We may liken the facts on which theories of evolution are based to a confused heap of beads, from which a keen-sighted searcher after truth picks out and strings together a few which happen to catch his eye, as possessing certain resemblances. Until recently, theories of evolution in both realms of nature were partial and discontinuous, and the chains of facts were correspondingly short and disconnected. length the theory of natural selection, by formulating the cause of the divergence of forms in the organic world from the parental stock, furnished the naturalist with a clue by which he examined the disordered mass of facts before him, and he was thus enabled to go far in deducing order where chaos had ruled before; but the problem of reducing the heap to perfect order will probably baffle the ingenuity of the investigator for ever.

So illuminating has been this new idea that, as the whole of nature has gradually been re-examined by its aid, thousands of new facts have been brought to light, and have been strung in due order on the necklace of knowledge. Indeed, the transformation resulting from the new point of view has been so far-reaching as almost to justify the misapprehension of the unscientific as to the date when the doctrines of evolution first originated in the mind of man.

It is not my object, nor indeed am I competent, to examine the extent to which the theory of natural selection

has needed modification since it was first formulated by my father and Wallace. But I am surely justified in maintaining that the general principle holds its place firmly as a permanent acquisition to modes of thought.

Evolutionary doctrines concerning inanimate nature, although of much older date than those which concern life, have been profoundly affected by the great impulse of which I have spoken. It has thus come about that the origin and history of the chemical elements and of stellar systems now occupy a far larger space in the scientific mind than was formerly the case. The subject which I shall discuss to-night is the extent to which ideas, parallel to those which have done so much towards elucidating the problems of life, hold good also in the world of matter; and I believe that it will be possible to show that in this respect there exists a resemblance between the two realms of nature, which is not merely It is proper to add that so fanciful. long ago as 1873 Baron Karl du Prel discussed the same subject from a similar point of view, in a book entitled 'The Struggle for Life in the Heavens."1

Although inanimate matter moves under the action of forces which are incomparably simpler than those governing living beings, yet the problems of the physicist and the astronomer are scarcely less complex than those which present themselves to the biologist. The mystery of life remains as impenetrable as ever, and in his evolutionary speculations the biologist does not attempt to explain life itself, but, adopting as his unit the animal as a whole, discusses its relationships to other animals and to the surrounding conditions. The physicist, on the other hand, is irresistibly impelled to form theories as to the intimate constitution of the ultimate parts of matter, and he desires further to piece together the past histories and the future fates of planets, stars, and nebulæ. If then the speculations of the physicist seem in some respects less advanced than those of the biologist, it is chiefly because he is more ambitious in his aims. Physicists and astronomers have note yet found their Johannesburg or Kimberley; but although we are still mere prospectors, I am proposing to show you some of the dust and diamonds which we have already extracted from our surface mines.

The fundamental idea in the theory of natural selection is the persistence of those types of life which are adapted to their surrounding conditions, and the elimination by extermination of illadapted types. The struggle for life amongst forms possessing a greater or less degree of adaptation to slowly varying conditions is held to explain the gradual transmutation of species. Although a different phraseology is used when we speak of the physical world, yet the idea is essentially the same.

The point of view from which I wish you to consider the phenomena of the world of matter may be best explained if, in the first instance, I refer to political institutions, because we all understand, or fancy we understand, something of politics, whilst the problems of physics are commonly far less familiar to us. This illustration will have a further advantage in that it will not be a mere parable, but will involve the fundamental conception of the nature of evolution.

The complex interactions of man with man in a community are usually described by such comprehensive terms as the State, the Commonwealth, or the Government. Various States differ widely in their constitution and in the degree of the complexity of their organization, and we classify them by various general terms, such as autoc-

^{1 &}quot;Der Kampf um's Dasein am Himmel." Zweite Auflage. (Berlin: Denicke, 1876.)

racy, aristocracy, or democracy, which express somewhat loosely their leading But, for the purpose characteristics. of showing the analogy with physics, we need terms of wider import than those habitually used in politics. forms of the State imply inter-relationship in the actions of men, and action implies movement. Thus the State may be described as a configuration or arrangement of a community of men; or we may say that it implies a definite mode of motion of man-that is to say, an organized scheme of action of Political history gives man on man. an account of the gradual changes in such configurations or modes of motion of men as have possessed the quality of persistence or of stability to resist the disintegrating influence of surrounding circumstances.

In the world of life the naturalist describes those forms which persist as species; similarly the physicist speaks of stable configurations or modes of motion of matter; and the politician speaks of States. The idea at the base of all these conceptions is that of stability, or the power of resisting disintegration. In other words, the degree of persistence or permanence of a species, of a configuration of matter, or of a State depends on the perfection of its adaptation to its surrounding conditions.

If we trace the history of a State we find the degree of its stability gradually changing, slowly rising to a maximum, and then slowly declining. When it falls to nothing a revolution ensues, and a new form of government is established. The new mode of motion or government has at first but slight stability, but it gradually acquires strength and permanence, until in its turn the slow decay of stability leads on to a new revolution.

Such crises in political history may give rise to a condition in which the State is incapable of perpetuation by transformation. This occurs when a savage tribe nearly exterminates another tribe and leads the few survivors into slavery; the previous form of government then becomes extinct.

The physicist, like the biologist and the historian, watches the effect of slowly varying external conditions; he sees the quality of persistence or stability gradually decaying until it vanishes, when there ensues what is called in politics, a revolution.

These considerations lead me to express a doubt whether biologists have been correct in looking for continuous transformation of species. Judging by analogy, we should rather expect to find slight continuous changes occurring during a long period of time, followed by a somewhat sudden transformation into a new species, or by rapid extinction. However this may be, when the stability of a mode of motion vanishes, the physicist either finds that it is replaced by a new persistent type of motion adapted to the changed conditions, or perhaps that no such transformation is possible, and that the mode of motion has become extinct. The evanescent type of animal life has often been preserved for us, fossilized in geological strata; the evanescent form of government is preserved in written records or in the customs of savage tribes; but the physicist has to pursue his investigations without such useful hints as to the past.

The time-scale in the transmutation of species of animals is furnished by the geological record, although it is not possible to translate that record into years. As we shall see hereafter, the time needed for a change of type in atoms or molecules may be measured by millionths of a second, while in the history of the stars continuous changes may occupy millions of years. Notwithstanding this gigantic contrast in speed, yet the process involved seems to be essentially the same.

It is hardly too much to assert that, if the conditions which determine stability of motion could be accurately formulated throughout the universe, the past history of the cosmos and its future fate would be unfolded. How indefinitely far we stand removed from such a state of knowledge will become abundantly clear from the remainder of my address.

The study of stability and instability then furnishes the problems which the physicist and biologist alike attempt to solve. The two classes of problems differ principally in the fact that the conditions of the world of life are so incomparably more intricate than those of the world of matter that the biologist is compelled to abandon the attempt to determine the absolute amount of the influence of the various causes which have affected the existence of species. His conclusions are merely qualitative and general, and he is almost universally compelled to refrain from asserting even in general terms what are the reasons which have rendered one form of animal life stable and persistent, and another unstable and evanescent.

On the other hand, the physicist, as a general rule, does not rest satisfied unless he obtains a quantitative estimate of various causes and effects on the systems of matter which he discusses. Yet there are some problems of physical evolution in which the conditions are so complex that the physicist is driven, as is the biologist, to rest satisfied with qualitative rather than quantitative conclusions. But he is not content with such crude conclusions except in the last resort, and he generally prefers to proceed by a different method.

The mathematician mentally constructs an ideal mechanical system or model, which is intended to represent in its leading features the system he wants to examine. It is often a task

of the utmost difficulty to devise such a model, and the investigator may perchance unconsciously drop out as unimportant something which is really essential to represent actuality. He next examines the conditions of his ideal system, and determines, if he can, all the possible stable and unstable configurations, together with the circumstances which will cause transitions from one to the other. Even when the working model has been successfully imagined, this latter task may often overtax the powers of the mathematician. Finally it remains for him to apply his results to actual matter, and to form a judgment of the extent to which it is justifiable to interpret nature by means of his results.

The remainder of my address will be occupied by an account of various investigations which will illustrate the principles and methods which I have now explained in general terms.

The fascinating idea that matter of all kinds has a common substratum is of remote antiquity. In the Middle Ages the alchemists, inspired by this idea, conceived the possibility of transforming the baser metals into gold. The sole difficulty seemed to them the discovery of an appropriate series of chemical operations. We now know that they were always indefinitely far from the goal of their search, yet we must accord to them the honor of having been the pioneers of modern chemistry.

The object of alchemy, as stated in modern language, was to break up or dissociate the atoms of one chemical element into its component parts, and afterwards to re-unite them into atoms of gold. Although even the dissociative stage of the alchemistic problem still lies far beyond the power of the chemist, yet modern researches seem to furnish a sufficiently clear idea of the structure of atoms to enable us to see

what would have to be done to effect a transformation of elements. Indeed, in the complex changes which are found to occur spontaneously in uranium, radium, and the allied metals we are probably watching a spontaneous dissociation and transmutation of elements.

Natural selection may seem, at first sight, as remote as the poles asunder from the ideas of the alchemist, yet dissociation and transmutation depend on the instability and regained stability of the atom, and the survival of the stable atom depends on the principle of natural selection.

Until some ten years ago the essential diversity of the chemical elements was accepted by the chemist as an ultimate fact, and indeed the very name of atom, or that which cannot be cut, was given to what was supposed to be the final indivisible portion of matter. The chemist thus proceeded in much the same way as the biologist who, in discussing evolution, accepts the species as his working unit. Accordingly, until recently the chemist discussed working models of matter of atomic structure, and the vast edifice of modern chemistry has been built with atomic bricks.

But within the last few years the electrical researches of Lenard, Röntgen, Becquerel, the Curies, of my colleagues Larmor and Thomson, and of a host of others, have shown that the atom is not indivisible, and a flood of light has been thrown thereby on the ultimate constitution of matter. Amongst all these fertile investigators it seems to me that Thomson stands pre-eminent, because it is principally through him that we are to-day in a better position for picturing the structure of an atom than was ever the case before.

Even if I had the knowledge requisite for a complete exposition of these investigations, the limits of time would compel me to confine myself to those parts of the subject which bear on the constitution and origin of the elements.

It has been shown, then, that the atom, previously supposed to be indivisible, really consists of a large number of component parts. By various convergent lines of experiment it has been proved that the simplest of all atoms, namely that of hydrogen, consists of about 800 separate parts; while the number of parts in the atom of the denser metals must be counted by tens of thousands. These separate parts of the atom have been called corpuscles or electrons, and may be described as particles of negative electricity. paradoxical, yet true, that the physicist knows more about these ultra-atomic corpuscles and can more easily count them than is the case with the atoms of which they form the parts.

The corpuscles, being negatively electrifled, repel one another just as the hairs on a person's head mutually repel one another when combed with a vulcanite comb. The mechanism is as yet obscure whereby the mutual repulsion of the negative corpuscles is restrained from breaking up the atom, but a positive electrical charge, or something equivalent thereto, must exist in the atom, so as to prevent disruption. The existence in the atom of this community of negative corpuscles is certain. and we know further that they are moving with speeds which may in some cases be comparable to the velocity of light, namely, 200,000 miles a sec-But the mechanism whereby they are held together in a group is hypothetical.

It is only just a year ago that Thomson suggested, as representing the atom, a mechanical or electrical model the properties of which could be accurately examined by mathematical methods. He would be the first to admit that his model is at most merely a crude representation of actuality, yet he has been

able to show that such an atom must possess mechanical and electrical properties which simulate, with what Whetham describes as "almost Satanic exactness," some of the most obscure and yet most fundamental properties of the chemical elements. "Se non è vero, è ben trovato," and we are surely justified in believing that we have the clue which the alchemists sought in vain.

Thomson's atom consists of a globe charged with positive electricity, inside which there are some thousand or thousands of corpuscles of negative electricity, revolving in regular orbits with great velocities. Since two electrical charges repel one another if they are of the same kind, and attract one another if they are of opposite kinds, the corpuscles mutually repel one another. but all are attracted by the globe containing them. The forces called into play by these electrical interactions are clearly very complicated, and you will not be surprised to learn that Thomson found himself compelled to limit his detailed examination of the model atom to one containing about seventy corpuscles. It is indeed a triumph of mathematical power to have determined the mechanical conditions of such a miniature planetary system as I have described.

It appears that in general there are definite arrangements of the orbits in which the corpuscles must revolve, if they are to be persistent or stable in their motions. But the number of corpuscles in such a community is not absolutely fixed. It is easy to see that we might add a minor planet, or indeed half a dozen minor planets, to the solar system without any material derangement of the whole; but it would not be possible to add a hundred planets with an aggregate mass equal to that of Jupiter without disorganization of the solar system. So also we might add or subtract from an atom three or four corpuscles from a system containing a thousand corpuscles moving in regular orbits without any profound derangement. As each arrangement of orbits corresponds to the atom of a distinct element, we may say that the addition or subtraction of a few corpuscles to the atom will not effect a transmutation of elements. An atom which has a deficiency of its full complement of corpuscles, which it will be remembered are negative, will be positively electrified, while one with an excess of corpuscles will be negatively electrified. I have referred to the possibility of a deficiency or excess of corpuscles because it is important in Thomson's theory; but as it is not involved in the point of view which I wish to take, I will henceforth only refer to the normal or average number in any arrangement of corpuscles. Accordingly we may state that definite numbers of corpuscles are capable of association in stable communitles of definite types.

An infinite number of communities are possible, possessing greater or lesser degrees of stability. Thus the corpuscles in one such community might make thousands of revolutions in their orbits before instability declared itself; such an atom might perhaps last for a long time as estimated in millionths of seconds, but it must finally break up and the corpuscles must disperse or rearrange themselves after the ejection of some of their number. We are thus led to conjecture that the several chemical elements represent those different kinds of communities of corpuscles which have proved by their stability to be successful in the strug-If this is so, it is gle for life. almost impossible to believe that the successful species have existed for all time, and we must hold that they originated under conditions about which I must forbear to follow Sir Norman Lockyer in speculating.2

² "Inorganic Evolution." (Macmillan, 1900.)

But if the elements were not eternal in the past, we must ask whether there is reason to believe that they will be eternal in the future. Now, although the conception of the decay of an element and its spontaneous transmutation into another element would have seemed absolutely repugnant to the chemist until recently, yet analogy with other moving systems seems to suggest that the elements are not eternal.

At any rate it is of interest to pursue to its end the history of the model atom which has proved to be so successful in imitating the properties of matter. The laws which govern electricity in motion indicate that such an atom must be radiating or losing energy, and therefore a time must come when it will run down, as a clock does. When this time comes it will spontaneously transmute itself into an element which needs less energy than was required in the former state. Thomson conceives that an atom might be constructed after his model so that its decay should be very slow. It might, he thinks, be made to run for a million years, but it would not be eternal.

Such a conclusion is an absolute contradiction to all that was known of the elements until recently, for no symptoms of decay are perceived, and the elements existing in the solar system must already have lasted for millions of years. Nevertheless, there is good reason to believe that in radium, and in other elements possessing very complex atoms, we do actually observe that break-up and spontaneous re-arrangement which constitute a transmutation of elements.

It is impossible as yet to say how science will solve this difficulty, but future discovery in this field must surely prove deeply interesting. It may well be that the train of thought which I have sketched will ultimately profoundly affect the material side of human life, however remote it may

now seem from our experiences of daily life.

I have not as yet made any attempt to represent the excessive minuteness of the corpuscles, of the existence of which we are now so confident; but, as an introduction to what I have to speak of next, it is necessary to do so. obtain any adequate conception of their size we must betake ourselves to a scheme of threefold magnification. Lord Kelvin has shown that, if a drop of water were magnified to the size of the earth, the molecules of water would be of a size intermediate between that of a cricket-ball and of a marble. Now each molecule contains three atoms, two being of hydrogen and one of oxy-The molecular system probably presents some sort of analogy with that of a triple star; the three atoms, replacing the stars, revolving about one another in some sort of dance which cannot be exactly described. I doubt whether it is possible to say how large a part of the space occupied by the whole molecule is occupied by the atoms; but perhaps the atoms bear to the molecule some such relationship as the molecule to the drop of water referred to. Finally, the corpuscles may stand to the atom in a similar scale of magnitude. Accordingly a threefold magnification would be needed to bring these ultimate parts of the atom within the range of our ordinary scales of measurement.

I have already considered what would be observed under the triply powerful microscope, and must now return to the intermediate stage of magnification, in which we consider those communities of atoms which form molecules. This is the field of research of the chemist. Although prudence would tell me that it would be wiser not to speak of a subject of which I know so little, yet I cannot refrain from saying a few words.

The community of atoms in water

has been compared with a triple star, but there are others known to the chemist in which the atoms are to be counted by fifties and hundreds, so that they resemble constellations.

I conceive that here again we meet with conditions similar to those which we have supposed to exist in the atom. Communities of atoms are called chemical combinations, and we know that they possess every degree of stability. The existence of some is so precarious that the chemist in his laboratory can barely retain them for a moment; others are so stubborn that he can barely In this case dissobreak them up. ciation and re-union into new forms of communities are in incessant and spontaneous progress throughout the Nature.

world. The more persistent or more stable combinations succeed in their struggle for life, and are found in vast quantities, as in the cases of common salt and of the combinations of silicon. But no one has ever found a mine of gun-cotton, because it has so slight a power of resistance. If, through some accidental collocation of elements, a single molecule of guncotton were formed, it would have but a short life.

Stability is, further, a property of relationship to surrounding conditions; it denotes adaptation to environment. Thus salt is adapted to the struggle for existence on the earth, but it cannot withstand the severer conditions which exist in the sun.

WITH THE MEHTAR'S FALCONS: A MORNING IN CHITRAL.

Morning had broken, but the climbing sun was still hidden from the dwellers in the towers and hamlets of Chitral by the great mountain masses to the east, when our party rode out of the residency gates and down the steep path leading to the bazar. There had been a hard frost in the night, and the air was keen and dry, making the snow-capped mountains stand out hard and sparkling. Crossing the wooden bridge over the stream which issues from the Chitral gorge, we noticed that it was half covered over with ice. As we clattered into the bazar, through which our road lay, people were just awaking to the day's work. A Bajauri trader was watching his pony-drivers throw the morning feed of chaff before the line of muffled-up animals which were to carry his goods north to far Badakshan, as soon as the snows on the passes were sufficiently melted. group of fur-clad men, whose fair complexions betokened their origin to be

north of the Hindu Kush, were preparing their early cup of tea. Shop doors were being opened, and clouds of dust voluming forth showed that the morning clean-up was going on. The bazar passed, the Mehtar's fort, with its four towers, came in sight, down among the chinar trees, where the river flowed a few hundred yards to our right.

As soon as we appeared, a crowd of men, who were waiting outside the fort, began to show signs of life, and shortly afterwards to move along the road which joined with ours a quarter of a mile farther on. As our roads converged, we recognized the Mehtar at the head of the procession, on a goodlooking Badakshan pony. A dozen Chitrali nobles and retainers, who happened at the time to be doing feudal service in the fort, formed the mounted part of his retinue, the people on foot, twenty or thirty in number, being servants and followers of no particular standing.

The Mehtar, Shuja-ul-Mulk, is a young man of five-and-twenty, though old beyond his years from the stirring Although scenes he has witnessed. his personality is not at first sight striking, his face indicates the possession of both shrewdness and determination; and, indeed, to rule over Chitralis successfully, as he has done since an unexpected turn in the wheel of fortune brought him to the top while he was still a child, he has need of both. His clothes on this occasion were the same as those of his following-the sombre-colored though picturesque national dress: a choga of homespun and rolled cap of the same stuff, and below baggy white pyjamas and long Russian leather boots. His pony, however, was gay with the silver-plated head-stall and trappings that come from Afghan Turkestan. The usual salutations given and returned, we cantered or walked on as the narrow path permitted, along the side of the impetuous Chitral river, past the quaint old bridge of black wooden beams, to where the big tributary from the Lutkoh valley mingles its blue waters with the muddier stream of the main river. Our venue was at the village of Singur, just beyond the junction; and here, suddenly turning a corner, we found ourselves in the middle of a group of some fifteen or twenty men with hawks on their fists, the Mehtar's falconers. Our saises1 were with them, and took our ponies as we dismounted.

In Chitral, among the pleasures of a pleasure-loving people, hawking comes first and polo second,—neither of them a sport which one would expect to find flourishing in a country which is a labyrinth of deep valleys, impassable rivers, and precipitous mountains. The former was introduced from Badakshan and the khanates of Central Asia,—a legacy from the earliest times when kings and emperors, from Alexander

The training of the bigger hawks is always placed in the hands of professional falconers, but there are probably few people of the upper classes in Chitral who are not capable of training a sparrow-hawk or one of the smaller falcons. Indeed it is the common gibe against the poorer nobles that, instead of trying to improve their position, they are content to loaf about their orchards all day with sparrowhawks on their fists. The professional falconers, of whom there are a large number, mostly belong to families who came originally from Badakshan, the home and birthplace of the royal sport.

The most celebrated of the Mehtar's falconers, or Mir-Shikar, was present to-day,-an old man with a beard dyed red, a bright eye and a hooked nose, not altogether in appearance unlike one of his own favorites. He was in charge of the Mehtar's most prized possession, a Shunkhar falcon, one of the largest and rarest of the longwinged hawks,-a magnificent bird, but of too little use as a pot-hunter for her ownership to be a matter of envy to people of lower degree, even if this had been possible. These hawks, as a matter of fact, never do pass into vulgar hands, for the Mehtar has the prescriptive right to every one that is taken in his country, as well as to all peregrines

the "two-horned" downwards, found in it a relaxation from empire-making and empire-breaking. In Chitral, however, the sport took root, and found so congenial a soil that the falconers of this country are now, in some of its branches at least, unrivalled by any. Who, for instance, in England, would believe that a wild-caught goshawk could be manned, trained, and flown at game on the fourteenth day after taking, and yet this is by no means an uncommon feat in Chitral. Here, five days is considered ample period in which to train a sparrow-hawk, and four days a merlin.

¹ Saises-grooms.

and goshawks, excepting the tiercel of the latter; so that all that are caught are either kept in the mehtari mews or given away by him to neighboring princes. Next in order of importance to the Shunkhar came the peregrines, of which there were two,-wild-looking, dark-eyed birds, the embodiment of the power of swift flight; three splendid goshawks, and several tiercels of this species, some shahin falcons, and a number of sparrow-hawks. To be fully representative of the hawks used in Chitral, there should have been included a charkh or Saker falcon, and two kinds of merlins; but the last few seasons having been bad ones, neither of these kinds had been taken, nor was in any one's possession in Chitral.

Of all the hawks in use in Chitral the goshawk is most esteemed. She is, par excellence, the hawk for a mountainous country, where long flights are not wanted. Next in order, in the Chitrali's estimation, comes the shahin. The bigger long-winged falcons go too far; and once out of view, their recovery in this extremely difficult country is always doubtful. They are lost to sight behind some mountain spur, and when this happens, are frequently lost altogether. The nature of the country, indeed, renders the long and high flights so admired in the long-winged hawks elsewhere, anything but desired in Chitral; and so, as a matter of necessity, they are treated and trained very similarly to the short-winged hawks. Thus, though the lure is thrown up to attract them, they are taught to return to the fist like the lat-Chitrali falconers, who can do anything with hawks, could no doubt teach them easily enough to soar above their heads on the look-out for game, or "wait on," as it is called; but it is practically never done. It is in the training of the wild-caught goshawk, normally completed in fourteen days and frequently in less, that the perfection

of the Chitrali's skill is shown. Marvellous as the feat may seem, there is really nothing esoteric about it. The result is achieved by constant care and attention, the methods used, including "waking," or sitting up all night with the newly-caught hawk, being much the same as those in vogue in England.

After loosening our ponies' girths and telling our saises where to take them, we looked at each hawk in turn, the Mehtar pointing out to us each one's special merits. The falconers, as he did so, unhooded those that required it, and smoothed down their neck-feathers with an indescribable air of pride.

The first drive was to be across theriver, and the whole party, preceded by the Hakim of Drosh, one of the Mehtar's leading ministers, but none the less a good falconer, walked along a narrow path at the bottom of the high cliff of conglomerate which overhung the water, to a point where a frail bridge had been thrown across. The footway consisted of two slenderpoles, the ends of which rested on other poles, which were projected from the bank, the shore ends being weighted Across the poles. down with stones. were laid osiers affording not too secure a footing. One by one we crossed, the lady of the party refusing all proffered assistance, much to the surpriseof the crowd, to whom all the doings of the latest arrival in Chitral were a constant source of astonishment. the least remarkable of these in their eyes was her seat on horseback, for it quite baffled their comprehension why she did not slip off on one side or theother.

A scramble over the big gray boulders in the river bed brought us to a little track zigzagging steeply upwards, following which, in a quarter of anhour, we reached a rocky eminence on a spur of the mountain which ran down into the river. A platform had been built up large enough to accommodate

a score of people, the front guarded by a low wall. Below us, to our front and right, were precipitous rocks; behind us the bare mountain rose up perpendicularly till lost to view; to our left was the narrow path over straight slopes of shale by which we had as-The blue river, flecked here cended. and there with white, flowed five hundred feet below our platform; beyond this the mountains rose up to an infinite height, all but the lowest slopes being deep in snow. Half a mile up the river could be seen the cultivated terraces of the village of Sin, and above them long straight screes of rock fragments. Between these screes and us was another rocky spur and more screes.

Our quarry to-day was to be the chakor, a fine big partridge, very similar to the "Frenchman" at home. The peculiarity of this partridge is that when alarmed he generally tries to escape by running up hill, which a pair of very strong legs enable him to do at a pace which defies the sportsman with It is only by approaching a gun. chakor from above, or on the level when their retreat uphill is cut off, that they can be induced to rise. For this reason they are pre-eminently birds to be driven and not walked up. Generations of practice have made Chitralis adepts at bringing these birds in the required direction, and almost every village has its well-known beats, the management of which is understood to a nicety. For the Mehtar's drives every able-bodied man in the village has to turn out, and though he receives no payment or even his day's victuals, it would never occur to him to regard the duty as a hardship. His ancestors have done the same, and in no country in the world are people more iron bound by custom than they are here.

The chakor had already left the cul-

tivated fields, as they usually do in the early morning, and were beginning their climb up the mountain side, when they found their progress barred by stops which had been posted a few hundred feet up, and were now in line slightly above us. The surprised birds' anger at such treatment was, as we arrived, being shouted out from rock to rock and spur to spur, their shrill gamey call echoing back from the cliffs on the opposite side of the river. The beaters were out of sight, but the signal to begin was passed on. The owners took their hawks from the falconers, and all stood ready.

Almost as the first distant shouting of the beaters reached us, a yell of "Hai! hai!" from the stops above us, and garments wildly waved in the air. signalled a single chakor. A stiff wind was blowing down the valley, and he. passed out of gunshot below us at a terrific pace. As he went by, the Mehtar balanced and swung forward the goshawk on his fist, and the bird with two strokes of her powerful wings was launched in pursuit. she got under way the Chitralis raised a prolonged shout, and the excitement was so infectious that we could barely refrain from cheering her on ourselves. We leant over the wall to watch the result, and were in time to see the flying chakor a brown ball two hundred yards away; but a bigger brown mass was rapidly closing on it, and the two came to earth together. The falconer. whose hawk it was, plunged down the hill to retrieve the quarry and take up the hawk. The Mehtar immediately turned and took a fresh hawk on his fist, but scarcely had he done so when shouts of "Hani! hani!" came from the stops, and a covey flew down wind close below us. The Mehtar again threw off his "gos," and another of the party a shahin falcon. A goshawk's tiercel (a male bird) is never flown si-

² Hai-coming, sing.

³ Hani-coming, plur.

multaneously with the female, which is bigger and stronger, and has an unpleasant way of mistaking him for her And now the game was at quarry! its height, cries of "Hai! hai!" or "Hani! hani!" followed each other in quick succession, and the chakor shot by us in single birds and coveys. One after another the hawks were thrown off, and it was a magnificent sight to see the great birds wheel round in the wind and dart off in pursuit. As each one was thrown off, the falconer in charge dashed after her at full speed to take up the hawk if a kill had been scored, or to call her off if unsuccessful. The latter is done by cries of "Doh, doh" for goshawks and the shortwinged kind, and "Koh, koh" for the long-winged hawks. To attract the latter, the lure made of crow's feathers is also thrown up into the air and whirled about. Both sorts come back on to the falconer's fist from long distances. If the flight is successful, the quarry's head is cut off, and the hawk after being rewarded with the brain is brought back for a fresh flight, and in this way the same hawk is frequently flown many times in a morning.

In Chitral, falconers besides being masters of their own art have need to be skilled cragsmen, as their hawks frequently take them among precipices and into the most dangerous ground. There was none of this sort of cragsman's work to-day, but a little incident occurred which showed us what these falconers are capable of. A young goshawk had been thrown off at a chakor which swung round to the right to make across the river. The owner of the falcon was delighted to see his young bird, a tiercel, bind to his quarry in mid air over the river, and carry him to the opposite bank. It was necessary to take the hawk up as quickly as possible, as he had not been flown at game more than once or twice before; so the falconer, in order to avoid

going round by the bridge, got across by worming himself along the hollow stem of a thin poplar which served to conduct a small irrigation stream across the river. The poplar trembled and bent under his weight, and looked as if either it or the side struts supporting it must go, but luckily both held firm. The falconer, after warily approaching the hawk where he sat "depluming" the chakor, took him up successfully, and returned by the same precarious way, with the hawk on his fist,-a feat of no small difficulty and danger.

The beaters gradually drew nearer. Precipitous places where they could not go were searched by huge rocks being dislodged and rolled down. These went bounding and crashing down the hillside, till with a huge splash they buried themselves in the water, frequently shooting half-way across the river. By this time the intervals between the chakor became longer, and they came in single birds, turned out with difficulty from rock crevices and other hiding-places, and all the hawks with the exception of the Shunkar had been flown several times. By far the prettiest flights to watch were those of the peregrines and shahins, which stooped and struck their quarry to the ground instead of seizing them in mid air. The Shunkar is not flown in these sorts of drives, but is reserved for heron- and crow-hawking.

The beaters gradually came up to us, a wild picturesque lot of men, full of talk, and anxious to hear about the sport. The bag on this occasion was not very good compared with the number of flights that had been witnessed; but this was owing to the high wind, which brought the birds down at a pace which frequently enabled them, with the start thus gained, fairly to outfly the hawks. The total was fifteen chakor and a mallard. The latter misguided bird was flying down the

river, and fell an easy prey to one of the Mehtar's goshawks.

Though a few duck are found about Chitral in the winter, the regular duckhawking season does not begin till March, when wild-fowl are travelling northward to the Central Asian lakes after spending the winter on the jhils and tanks of India, where the good living they have been enjoying has put them in first-class condition. modus operandi, which it must be confessed savors somewhat of poaching, is as follows. After a settling of wildduck have been marked, usually in some sandy bay of the river or a flooded rice-field, the hawking party stalk them in line. In the middle are the falconers, two or more in number, and at either end of the line is a man with a copper kettle-drum, generally bound with red velvet. On arriving as close as possible to the duck without being seen, the drummers commence a tremendous dinning, and the hawks, thrown off at the same instant, are in and among the duck while they are rising off the water. In this way often as many duck are bagged as there are hawks. The rationale of the method is simple: if the hawks are thrown off before the duck rise, the latter refuse to leave the water, and the hawks will not attack them there. If, on the other hand, the duck get well into their flight, they will generally outfly the hawks unless a start is obtained from well above them; so to avoid the double difficulty this ingenious method has been evolved. The Mehtar has built a small house on the river a mile or so above Chitral, and during the duckhawking season his falconers remain there most of the forenoon, awaiting the arrival of a flight of duck. About this spot there are a number of bays and backwaters in the river, all of which are flanked by walls built up of round boulders, to afford the falconers cover in approaching.

The drive over, we descended and crossed the river. Preparations had been made for a drive on the other bank; but owing to a report arriving of a large spotted eagle that had been seen to haunt the cliffs lower down, in the direction the driven birds would take, and which would have made short work of any falcon coming his way, the idea of a drive there was abandoned. These spotted eagles (Spizætus nipalensis) are very common in Gilgit and Chitral, where they do an immense amount of damage amongst not only game birds, but the young of ibex, markhor, and oorial, too. late Mehtar, Nizam-ul-Mulk, who was passionately fond of hawking, had one of them caught and trained, report says with success; but their size and weight, not to mention their voracious appetite, preclude their being brought into general use. Nizam-ul-Mulk, "Maga's" readers may perhaps remember, was the Mehtar whose murder, which took place when he was out hawking, started the conflagration which ended in the Chitral campaign. He was shot in the back while watching the flight of one of his falcons. The present Mehtar, remembering his brother's fate, always has his back guarded by men he can trust wherever he goes.

On our road home we came to a flat sandy plain, where the river spread out below us into several glittering streams, and where the Mehtar hoped to be able to exhibit the prowess of his Shunkar on a crow. Luck was with us, for some black dots on the water's edge were seen moving about. After the head-falconer had assured himself they were not choughs, which decline to play the game, he took his Shunkar up the hill above us, and sent a man to put the birds up in our direction. As soon as they were on the wing the falcon was thrown off, and made a terrific swoop on one of the

1498

crows; but when his enemy was seemingly within a foot of him, the wily bird cleverly, and apparently without the least exertion, shifted to one side, and she missed. The rest of the crows flew off, and the field was left clear for the contest. The falcon rising again, as if on the rebound, made another stoop, which was similarly evaded, and another, and another. Each stoop called forth a groan of excitement from the onlookers. For a time this exceedingly pretty game went on, and it just seemed a case of which of the two could last the longest. game it looked, for the crow seemed to take matters so easily, and evade his adversary with so little exertion, that one almost forgot he was playing for Suddenly a puff of black his life. Habet! The two birds defeathers. scend slowly to the ground together, and all is over.

Blackwood's Magazine.

The sun had long since flooded the valley, reminding us, if our appetites had not, that the day was getting on, and breakfast was still before us. home was the word. We said goodbye to the Mehtar where our roads parted, he gently deprecating our thanks for the morning's sport, and ten minutes later we were satisfy-The morning our hunter's hunger. ing had been one which, for beauty of scenery and general picturesqueness, not to mention the wonderful skill exhibited by these hill-men in training the wildest of God's wild creatures to do their bidding, will not easily be forgotten; and half of us at the breakfast-table were ready to lament the invention of "villainous saltpetre," that had almost put an end in our own country to so fascinating a sport.

R. L. Kennion.

PETER'S MOTHER.

BY MRS. HENRY DE LA PASTURE.

CHAPTER VI.

"Is that you, Cousin John?" said Lady Mary. "Is Sir Timothy gone? I have not been away more than a few minutes, have I?"

She spoke quite brightly. Her cheeks were flushed, and her blue eyes were sparkling with excitement.

John looked at her, and found himself wishing that her soft, brown hair were not strained so tightly from her forehead, nor brushed so closely to her head; the fashion would have been trying to a younger face, and fatal to features less regularly delicate and correct. He also wished she were not dressed like a Quaker's wife. The stiff, gray poplin fitted like a glove the pretty curves of Lady Mary's slender figure, but it lacked distinction, and appropriateness, to John's fastidious eye. Then he reproached himself vehemently for allowing his thoughts to dwell on such trifles at such a moment.

"Will you forgive me for going away the very day you come?" said Lady Mary.

How quickly, how surprisingly, she recovered her spirits! She had looked so weary and sad as she came down the stairs an hour ago. Now she was almost gay. A feverish and unnatural gaiety, no doubt; but those flushed cheeks, and glittering blue eyes—how they restored the youthful loveliness of the face he had once thought the most beautiful he ever saw!

"I am going to see the last of my boy. You'll understand, won't you? You were an only son too. And your mother would have gone to the ends of the earth to look upon your face once more, wouldn't she? Mothers are made like that."

"Some mothers," said John; and he turned away his head.

"Not yours? I'm sorry," said Lady Mary, simply.

"Oh, well-you know, she was a good deal-in the world," he said, repenting himself.

"I used to wish so much to live in the world too," said Lady Mary, dreamily; "but ever since I was fifteen I've lived in this out-of-the-way place."

"Don't be too sorry for that," said John; "you don't know what a revelation this out-of-the-way place may be to a tired worker like me, who lives always amid the unlovely sights and sounds of a city."

"Ah! but that's just it," she said quickly. "You see I'm not tired—yet; and I've done no work."

"That is why it's such a rest to look at you," said John, smiling. "Flowers have their place in creation as vegetables have theirs. But we only ask the flowers to bloom peacefully in sheltered gardens; we don't insist on popping them into the soup with the onions and carrots."

Lady Mary laughed as though she had not a care in the world.

"It is quite refreshing to find that a big-wig like you can talk just as much nonsense as a little-wig like me," she said; "but you don't know, for all that, what the silence and monotony of life here can be. The very voice of a stranger falls like music on one's ears. I was so glad to see you, and you were so kind and sympathetic about—my boy. And then, all in a moment, my joy was turned into mourning, wasn't it? And Peter is going to the war, and it's all like a dreadful dream; except that I know I shall

wake up every morning only to realize more strongly that it's true."

John remembered that he was dallying with his mission, instead of fulfilling it.

"Sir Timothy cannot go to see his son off? That must be a grief to him," he said.

"No; he isn't coming. He has business, I believe," said Lady Mary, a lit-"There has been a dispute tle coldly. over some Crown lands, which march with ours. Officials are often very dilatory and difficult to deal with. Probably, however you know more about it than I do. I am going alone. I have just been giving the necessary I shall take a servant with me, as well as my maid, for I am such an inexperienced traveller-though it seems absurd, at my age-that I am quite frightened of getting into the wrong trains. I dread a journey by myself. Even such a little journey as But, of course, nothing would keep me at home."

"Only one thing," said John, in a low voice, "if I have judged your character rightly in so short a time."

"What is that?"

"Duty."

She looked at him with sweet, puzzled eyes, like a child.

"Are you pleading Sir Timothy's cause, Cousin John?" she said, with a little touch of offence in her tone that was only charming.

"I am pleading Sir Timothy's cause," said John, seriously.

"Love is stronger than duty, isn't it?" said Lady Mary.

"I hope not," said John, very simply.
"You mean my husband doesn't wish
me to go?"

"Don't think me too presuming," he said pleadingly.

"I couldn't," said Lady Mary, naïvely.
"You are older than I am, you know,"
she laughed, "and a Q.C. And you
know you would be my trustee and my

boy's guardian if anything ever happened to Sir Timothy. He told me so long ago. And he reminded me of it to-day most solemnly. I suppose he was afraid I shouldn't treat you with proper respect."

"He has honored me very highly," said John. "In that case, it would be almost my—my duty to advise you in any difficulty that might arise, wouldn't it?"

"That means you want to advise me now."

"Frankly, it does."

"And are you going to tell me that I ought to stay at home, and let my only boy leave England without bidding him God-speed?" said Lady Mary incredulously. "If so, I warn you that you will never convince me of that, argue as you may."

"No one is ever convinced by argument," said John. "But stern facts sometimes command even a woman's attention."

"When backed by such powers of persuasion as yours, perhaps."

She faced him with sparkling eyes. Lady Mary was timid and gentle by nature, but Peter's mother knew no fear. Yet she realized that if John Crewys were moved to put forth his full powers, he might be a difficult man to oppose. She met his glance, and observed that he perfectly understood the spirit which animated her, and that it was not opposition that shone from his bright hazel eyes, as he regarded her steadily through his pince-nez.

"I am going to deal with a hard fact, which your husband is afraid to tell you," said John, "because, in his tenderness for your womanly weakness, he underrates, as I venture to think, your womanly courage. Sir Timothy wants you to be with him here to-morrow because he has to—to fight an unequal battle—"

"With the Crown?"

"With Death."

"What do you mean?" said Lady Mary.

"He has been silently combating a mortal disease for many months past," said John, "and to-morrow morning the issue is to be decided. Every day, every hour of delay, increases the danger. The great surgeon, Dr. Herslett, will be here at eleven o'clock, and on the success of the operation he will perform, hangs the thread of your husband's life."

Lady Mary put up a little trembling hand entreatingly, and John's great heart throbbed with pity. He had chosen his words deliberately to startle her from her absorption in her son; but she looked so fragile, so white, so imploring, that his courage almost failed him. He came to her side, and took the little hand reassuringly in his strong, warm clasp.

"Be brave, my dear," he said, with faltering voice, "and put aside, if you can, the thought of your bitter, terrible disappointment. Only you can cheer, and inspire, and aid your husband to maintain the calmness of spirit which is of such vital importance to his chance of recovery. You can't leave him against his wish at such a moment; not if you are the—the angel I believe you to be," said John, with emotion.

There was a pause, and though he looked away from her, he knew that she was crying.

John released the little hand gently. and walked to the fireplace to give her time to recover herself. Perhaps his eye-glasses were dimmed; he polished them very carefully.

Lady Mary dashed away her tears, and spoke in a hard voice he scarcely recognized as hers.

"I might be all—you think me, John," she said, "if——"

"Ah! don't let there be an if," said John.

"But--"

"Or a but."

"It is that you don't understand the situation," she said; "you talk as though Sir Timothy and I were an ordinary husband and wife, entirely dependent on one another's love and sympathy. Don't you know he stands alone—above all the human follies and weaknesses of a mere woman? Can't you guess," said Lady Mary, passionately, "that it's my boy, my poor faulty, undutiful boy—oh, that I should call him so!—who needs me? that it's his voice that would be calling in my heart whilst I waited Sir Timothy's pleasure to-morrow?"

"His pleasure?" said John, sternly.

"I am shocking you, and I didn't want to shock you," she cried, almost wildly. "But you don't suppose he needs me-me myself? He only wants to be sure I'm doing the right thing. He wants to give people no chance of saying that Lady Mary Crewys rushed off to see her spoilt boy whilst her husband hovered between life and death. A lay figure would do just as well; if it would only sit in an armchair and hold its handkerchief to its eyes; and if the neighbors, and his sisters, and the servants could be persuaded to think it was I."

"Hush, hush!" said John.

"Do let me speak out; pray let me speak out," she said, breathless and imploring, "and you can think what you like of me afterwards, when I am gone, if only you won't scold now. I am so sick of being scolded," said Lady Mary. "Am I to be a child for ever—I, that am so old, and have lost my boy?"

He thought there was something in her of the child that never grows up; the guilelessness, the charm, the ready tears and smiles, the quick changes of mood.

He rolled an elbow-chair forward and put her into it tenderly.

"Say what you will," said John.

"This is comfortable," she said, lean-

ing her head wearily on her hand; "to talk to a—a friend who understands, and who will not scold. But you can't understand unless I tell you everything; and Timothy himself, after all, would be the first to explain to you that it isn't my tears, nor my kisses, nor my consolation he wants. You didn't think so really, did you?"

John hesitated, remembering Sir Timothy's words, but she did not wait for an answer.

"Yes," she said calmly, "he wishes me to be in my proper place. It would be a scandal if I did such a remarkable thing as to leave home on any pretext at such a moment. Only by being extraordinarily respectable and dignified can we live down the memory of his father's unconventional behavior. I must remember my position. I must smell my salts, and put my feet up on the sofa, and be moderately overcome during the crisis, and moderately thankful to the Almighty when it's over, so that every one may hear how admirably dear Lady Mary behaved. And when I am reading the Times to him during his convalescence," she cried, wringing her hands, "Peter-Peter will be thousands of miles away, marching over the veldt to his death."

"You make very sure of Peter's death," said John, quietly.

"Oh yes," said Lady Mary, listlessly.
"He's an only son. It's always the only sons who die. I've remarked that."

"You make very sure of Sir Timothy's recovery."

"Oh yes," Lady Mary said again.
"He's a very strong man."

"Why do you look like that?"

Something ominous in John's face and voice attracted her attention.

"Because," said John, slowly—"you understand I'm treating you as a woman of courage—Dr. Blundell told me just now that—the odds are against him." She uttered a little cry.

The doctor's voice at the end of the hall made them both start.

"Lady Mary," he said, "you will forgive my interruption. Sir Timothy desired me to join you. He feared this double blow might prove too much for your strength."

"I am quite strong," said Lady Mary.

"He wished me to deliver a message," said the doctor.

"Yes."

"On reflection, Sir Timothy believes that he may be partly influenced by a selfish desire for the consolation of your presence in wishing you to remain with him to-morrow. He was struck, I believe, with something Mr. Crewys said—on this point."

"God bless you, John!" said Lady Mary.

"Hush!" said John, shaking his head. Dr. Blundell's voice sounded, John thought, as though he were putting force upon himself to speak calmly and steadily. His eyes were bent on the floor, and he never once looked at Lady Mary.

"Sir Timothy desires, consequently," he said, "that you will consider yourself free to follow your own wishes in the matter; being guided, as far as possible, by the advice of Mr. Crewys. He is afraid of further agitation, and therefore asks you to convey to him, as quickly as possible, your final decision. As his physician, may I beg you not to keep him waiting?"

He left them, and returned to the study.

Though it was only a short silence that followed his departure, John had time to learn by heart the aspect of the half-lighted, shadowy hall.

There are some pauses which are illustrated to the day of a man's death, by a vivid impression on his memory of the surroundings.

The heavy, painted beams crossing and recrossing the lofty roof; the black staircase lighted with wax-candles, that made a brilliancy which threw into deeper relief the darkness of every recess and corner; the full-length, early Victorian portraits of men and women of his own race—inartistic daubs, that were yet horribly lifelike in the semi-illumination; the uncurtained mullioned windows; all formed a background for the central figure in his thoughts; the slender womanly form in the armchair; the little brown head supported on the white hand; the delicate face, robbed of its youthful freshness, and yet so lovely still.

"John," said Lady Mary, in a voice from which all passion and strength had died away, "tell me what I ought to do."

"Remain with your husband."

"And let my boy go?" said Lady Mary, weeping. "I had thought, when he was leaving me, perhaps for ever, that—that his heart would be touched—that I should get a glimpse once more of the Peter he used to be. Oh, can't you understand? He—he's a little—hard and cold to me sometimes—God forgive me for saying so—but you—you've been a young man too."

"Yes," John said, rather sadly, "I've been young too."

"It's only his age, you know," she "He couldn't always be as gentle and loving as when he was a child. A young man would think that so babyish. He wants, as he says, to be independent, and not tied to a woman's apron-string. But in his heart of hearts he loves me best in the whole world. and he wouldn't have been ashamed to let me see it at such a moment. I should have had a precious memory of him for ever. You shake your Don't you understand me? I head. thought you seemed to understand," she said wistfully.

"Peter is a boy," said John, "and life is just opening for him. It is a hard saying to you, but his thoughts are full

of the world he is entering. There is no room in them just now for the home he is leaving. That is human nature. If he be sick or sorry later on-as I know your loving fancy pictures himhis heart would turn even then, not to the mother he saw waving and weeping on the quay, amid all the confusion of departure, but to the mother of his childhood, of his happy days of long ago. It may be"-John hesitated, and spoke very tenderly-"it may be that his heart will be all the softer then, because he was denied the parting interview he never sought. The young are strangely wayward and impatient. They regret what might have been. They do not, like the old, dwell fondly upon what the gods actually granted them. It is you who will suffer from this sacrifice, not Peter; that will be some consolation to you, I suppose, even if it be also a disappointment."

"Ah, how you understand?" said Peter's mother, sadly.

"Perhaps because, as you said, just now, I have been a young man too," he said, forcing a smile. "Oh, forgive me, but let me save you; for I believe that if you deserted your husband today, you would sorrow for it to the end of your life."

"And Peter-" she murmured.

He came to her side, and straightened himself, and spoke hopefully.

"Give me your last words and your last gifts—and a letter—for Peter, and send me in your stead to-night. I will deliver them faithfully. I will tell him—for he should be told—of the sore straits in which you find yourself. Set him this noble example of duty, and believe me, it will touch his heart more nearly than even that sacred parting which you desire."

Lady Mary held out her hand to him. "Tell Sir Timothy that I will stay," she whispered.

John bent down and kissed the little hand in silence, and with profound respect.

Then he went to the study without looking back.

When he was gone, Lady Mary laid her face upon the badly painted miniature of Peter, and cried as one who had lost all hope in life.

(To be continued.)

THE DRAMATIC ELEMENT IN DICKENS.

A great French dramatist has recorded his conviction that the only essential elements in a good play are—two characters, a chair, and a situation; a dictum so true that it is not only well worth thinking over by itself, but may be used as a standard by which to measure the dramatic possibilities inherent in those authors who have not decided the matter for us by choosing the dramatic form as the expression of their genius. The author who only gives us "persons," or "chairs," or "situations," is doubly

doomed to failure, for nothing short of the complete triad will suffice. We must have persons—real, living, breathing people too!—and the right setting (symbolized by the chair) and a telling situation, before we have even the rough material which will polish into an actable play.

Much has been said and written about the possibility of dramatizing the works of Charles Dickens, and in face of the numerous failures and precarious successes of the stage versions given to the public, there is a tendency

on the part of the critics to pronounce the task impossible; but devotees of Dickens who are likewise lovers of the drama are loath to accept the verdict. and it is more than likely that valiant attempts at adaptation will continue to be made for generations to come. That being the case, it may perhaps be worth while to examine the dramatic possibilities of our author by the light of the Frenchman's dictum quoted above, and as far as the first requisite goes there can be no hesitation as to the answer. The vast majority of the characters drawn by Dickens have remarkable vitality, and a very large percentage of them, if placed upon the boards, would make the colorless puppets of the average dramatist fade into comparative insignificance-that is, as far as the actual portraiture is concerned. Further, he has characters suited to Farcical charevery type of drama. acters-occasionally bordering on the burlesque-are plentiful in all his books, and notably in those of his early period. The inimitable family of Squeers, Mr. Vincent Crummles and his entire company, Ben Allen and Bob Sawyer, the choleric Dr. Slammer, Mrs. Joe Gargery with her bottle of tarwater, Mrs. Varden, and the devoted Miggs, all belong to this category; and next in order comes a train of "domestic-comedy" characters-the Wilfers, the Boffins, the Pecksniffs, the Dorrits, the Cheeryble brothers, Mrs. Lupin, Peggotty, and a host of others in unending procession. "Eccentric comedy" is almost as lavishly dealt with as either of the foregoing classes, and gives us an infinite variety of types admirably suited to purposes of light relief. Harold Skimpole, Miss La Creevy, Mr. Toots, Betsey Trotwood, Newman Noggs, and the immortal Micawber would all make excellent side characters, and the list might be enormously extended. In pathetic comedy, Tom Pinch stands easily king of the

Dickens company, and on realizing how few are the figures we can place beside him on this platform we begin to feel the limitations of our author. Mrs. Keeley achieved a striking success as "Smike," Miss Jenny Lee has harrowed her thousands as "Jo," but it may be questioned how far it is legitimate to employ the gradual development of phthisis as a probe to reach the hearts of one's audience, and there is no doubt that the wonderful realism of the consumptive cough made a very large claim on the sympathy of the spectators in both these cases. Tom Pinch has no need of such adventitious aids; the manly way in which he faces his misfortunes, the quiet heroism with which he hides his heartache lest a suspicion of it should give a moment's pain to others, his sunshiny temperament and the beautiful unselfishness of his daily life, all combine to make him one of the most lovable characters of fiction. It is noteworthy that he was particularly near to Dickens's own heart, so much so that in writing to Robert Keeley about an adaptation of Martin Chuzzlewit, which the latter was about to present to the public, the author admits that he feels "secure" about Ruth Pinch and "certain" of Mrs. Gamp; "but," he adds characteristically, "a queer sensation begins in my legs, and comes upwards to my forehead, when I think of Tom." certainly would be harrowing to an author's feeling to see such a part unsympathetically taken; but there are few actors worthy of the name who Seldom, indeed, has could so take it. Dickens so successfully held his hand in adding pathetic touches to a char-His own temperament was so acter. exuberantly joyous that the mere absence of joy makes him restless, and face to face with the big sorrows of life he is apt to lose his nerve to such an extent that an hysterical element creeps into his portraiture.

strength of his own emotion blurs the clearness of his perception, and the more he strains and strives in his efforts to make his readers feel the suffering he describes, the more shadowy and unreal do his characters become. "The death of Little Nell," says Mr. Gissing, "is not the dying of a little girl, but the vanishing of a beautiful dream," and less sympathetic critics have described her as "a mere creature of the footlights." As a matter of fact, this is hard upon the footlights, for tested practically by their standard, Little Nell has, in the long run, proved If there is one thing the a failure. stage exacts more than another, it is vitality, and that quality is hopelessly lacking in her. Not all the descriptive paragraphs that Dickens contrived in her honor can give her one-half the reality of the little "Marchioness," who steps casually into the story to announce a visitor, and forcibly impress her individuality on Dick Swiveller and ourselves before she has uttered three sentences. As far as the stage is concerned, the one child is a living, breathing piece of flesh and blood, capable of delighting any audience, and the other is an under-exposed photograph, of which nothing can be seen across the footlights but the elaborately constructed frame.

Passing from pathetic drama to tragedy proper, we find ourselves again compelled to admit the limitations of our author. A Tale of Two Cities gives us his one thoroughly successful tragic figure, and the secret of the success is not very far to seek. "I have so far verified what is done and suffered in these pages," he tells us in his preface, "as that I have certainly done and suffered it all myself." And in a letter to Miss Boyle he confesses, "I must say that I like my Carton, and I have a faint idea sometimes that if I acted him I could do something with his life and death." Such a complete identification of the author with the character created is the surest possible safeguard against that tendency in Dickens which too often allows his pathos to run to seed, and converts what would fain be tragedy into melodrama.

And in this same field of melodrama we get back once more to a wealth of types suited to stage purposes; characters virtuous or vicious, with the labels very clearly marked; personages "poor but honest" or wealthy and arrogant; hardened criminals or suffering saints in abundance, with an ample provision of jovial detectives who put everything right before the curtain falls. Sikes and his victim Nancy-and, indeed, most of the Oliver Twist characters-belong to this company; so does Sir Leicester Dedlock, Bart., and his haughty lady, as also Mr. Tulkinghorn, the family lawyer; Hortense, the French maid; Inspector Bucket, and portly Mrs. Rouncewell with her longlost son. Other popular melodramatic types circle round the story of Little Em'ly and have tempted several theatrical managers to place them on the Uriah Heep, Rosa Dartle, the fatally-fascinating Steerforth and his valet, Little Em'ly herself and her faithful swain, are all familiar types to lovers of melodrama, and it is not very easy to understand why such adaptations should fail. Melodrama we have always with us, and Dickens's melodramatic characters, though far below his own best, are many degrees nearer life than the dastardly dukes and languishing ladyships and virtuous rustics who deceive or defy each other nightly on the boards of our minor theatres. It should be noted also that not only are these individual portraits of almost every type excellently drawn, but they are grouped for us with consummate skill. Their family ties, their bonds of friendship, of love, or of duty appeal to us. We understand the link that binds their hearts together, and

realize the intuitive dislike that drives some of them asunder.

So far, good; but what of our Frenchman's second requisite—the setting of the piece, quaintly symbolized by the chair? Once more it is in farce and comedy that our author shines most successfully. As far as these divisions of the drama go he gives us a choice of "chairs"—any amount of them, and of all shapes and sizes. The setting is generally excellent, the "business" suggested—or implied—artistic and natural, and of so free a growth that the pruning-knife is frequently in requisition.

In tragedy, on the other hand, our author is less at home. On the rare occasions on which he attains to it, he manages to let well alone: but too often he just falls short, and the scene is marred by over-elaboration. There is no need of complicated stage directions in tragedy, and to put them in with a lavish hand only cheapens the effect; for the moment a would-be tragic figure puts on frills and furbelows, either in speech or movement, it steps at once into the realm of melodrama, in which region our author walks with a very uncertain step. The "chair" is provided, but it is somehow or other of the wrong pattern, and the characters are apt to scorn it when they most need rest, and to sink down on it when one expects them to be up and doing. Dickens's melodramatic women, especially, faint and weep and kneel and implore in a jerkily automatic fashion, and their efforts after self-control leave us as coldly unsympathetic as do their emotional out-One of the worst instances of unconvincing "business" is shown by Mlle. Hortense, the French maid in Bleak House, who takes off her shoes and wades through wet grass in order to give vent to her feelings of anger and jealousy. This action is so incredible and unnatural in an elegant "Parisienne" that one wonders whether the author really imagined the incident. It seems more probable that he has given us an unsuccessful portrait of some abnormal occurrence in actual life. This is, of course, an "extreme case" of failure, but a similar sense of unreality affects us in reading the scenes between Edith Grainger and Florence, or Lady Dedlock and her daughter, and examples might easily be multiplied.

As regards our French critic's third requisite-the "situation"-it is much more difficult to speak, for the simple reason that comparatively few stage managers, however experienced, can feel any certainty about recognizing an effective stage situation from reading Not even successful rehearsal can give a trustworthy verdict; nothing short of a house well filled by a representative and unbiased audience will tell us whether there is that in a play which can reach the hearts of the spectators. "What is going to happen next?" must be the one absorbing question; and a play is never really successful unless this feeling of interest can be awakened time after time, even when the audience knows the sequence of events beforehand. Dickens devoted himself to dramatic writing, he would probably have learnt much concerning this matter along the thorny path of repeated failure, for, as Mr. Gissing truly says, he never had any command of situation. Fortunately for himself and others, situation not infrequently had command of him, and once more it is in the realms of farcical and pathetic comedy that we have to look for the really "telling" junctures in his stories. Just when he is thinking least about it, absorbed in some delicious bit of dialogue or characteristic touch of portraiture, the dramatic moment arrives, and author and audience are one in intensity of interest. For example, the attempt to show the gradual development of Bella

Wilfer's character through varied experiences in the house of the Boffins, leads up naturally and easily to the excellent scene in which she defies Mr. Boffin, and declares her love for his ill-used secretary; and the casual arrival of Mrs. Nickleby's mad admirer by means of the parlor chimney-piece carries us straightway into the third act of a highly satisfactory farce. Yet the original purpose of our author when introducing the lunatic was probably only to add the high lights to Mrs. Nickleby's portrait, which certainly gained enormously by the arrival of her eccentric suitor upon the scene. It will be noted that both of these situations are placed before the audience almost entirely in dialogue form, and here, perhaps, we may lay our fingers on a kind of rough test which may be applied to a novel by a would-be adapter before selecting the portions of the story to be dramatized. Does a situation require elaborate paragraphs of description before it can be clearly placed before the reader? Then it is probably unsuitable for theatrical representation. Is the point at issue indicated fully by the words of the characters, with but slight aid from The Dickensian.

the context? The chances are that it would be a success on the stage. The death of Little Nell is one of the most popular descriptive passages that Dickens ever wrote, but there is nothing in it to dramatize. It is a tribute to the novelist's powers that so many attempts have been made to work the incident into a stage play, but such attempts show little critical acumen on the part of his adapters, and similar blunders in judgment are curiously common. The three characters suggested to me by professional actors as "splendid acting parts" are Jonas Chuzzlewit ("after the murder" especially!), Bradley Headstone, and Bill How much would the reader know about these gentlemen minus the descriptions? and what is their dialogue worth? Next to nothing. on these lines will satisfactory adaptations ever be achieved, and until stage managers and dramatists realize that a descriptive triumph is miles removed from histrionic success, our English drama will remain unenriched by all the wealth of material-and especially of comedy material-which lies locked up in the novels of Charles Dickens.

Isabelle M. Pagan.

VANISHING VIENNA.

A RETROSPECT.

These notes, made some ten years ago, have hardly more than a historical interest now, for Viennese society has since then undergone great changes. The ensnaring old-world aroma, elusive and intangible though it was, is now barely more than a memory, and I daresay the generation which has replaced the one I knew will declare that my account in many ways is incorrect. This, however, is not the case, as those who knew Vienna in the eighties can aver, and these notes were made soon

after my departure from that city, when my impressions were quite vivid, and the sorrow at the parting from so many loved friends still fresh. I will, therefore, give them as they were made, without any changes, as I fear to trust the correctness of my memory after a lapse of fifteen years.

It is not possible, I think, to give a just and adequate idea of Viennese society without showing out of what roots it sprung, and this I propose to do in a few words. When Francis the

First renounced in 1806 the title of Emperor of the Holy Roman Empire, and assumed the one of Emperor of Austria, he severed himself completely from German interests, and many of the highest German aristocracy who had hitherto flocked to Vienna withdrew to their respective counties, leaving only a small nucleus of society formed of the richest and most powerful families belonging to the different parts of the Austrian Empire. diaries of Frederic Gentz, the wellknown and celebrated diplomatic agent, give a very good idea of this transformation. This society was composed of some families belonging to Austria proper, a fair proportion of great Bohemian names, a few Hungarians, and a sprinkling of Poles. They all had splendid palaces in Vienna, and some of these families live in them unto this day. The principal and ever-recurring names in Gentz's diaries are Liechtenstein, Auersperg, Dietrichstein, Harrach, Metternich, Esterhazy, Schönborn, Rasomoffsky, Pallavicini, Palffy, Such was the composition of society at the time of the Congress in 1815, and it is not very much changed now. Vienna had through the best part of the nineteenth century the reputation of being the gayest capital of Eu-Relieved from the strain and agitation of Napoleonic days, the Austrian aristocracy gave itself up with its natural insouciance to its love of sport, pleasure, and display, living a life of continual social intercourse, whiling time away in its own "gemüthlich" fashion, and never caring what the future might have in store of good or evil. Vienna was always pre-eminent for the facilities it affords of spending money, and together with Paris it set for the Continent the fashions in dress, furniture, and carriages. Many foreigners of high degree came there, and were always received with cordial hospitality whatever the season

of the year might be; for, until the existence of railways, many of the great. families lived in their villas and country-houses close to the town, or even in the suburbs or in summer resorts on the green and smiling slopes of the "Wiener Wald," a chain of wooded hills which encircles Vienna on the south and west. The waters of Carlsbad, so fashionable up to the beginning of the sixties, were a favorite meeting-place for aristocratic Europe. Princes, statesmen, and diplomats went there, and many members of great Austrian families, also some of the bankers and rich merchants came from the capital; but these latter formed a completely different society, for then, as now, the line was clearly and firmly drawn, and when Viennese society is spoken of, it must be understood that it means the score or two of noble families, some of which have been mentioned, and that no exception is made to this rule.

A second society does exist; it is wealthy and very fashionable, and said to be amusing, and some of the young men belonging to the first society frequent it. It consists of bankers, artists, merchants, architects, engineers, actors, employés, and officers, with their families. The only occasions on which the two societies meet are the great public charity balls; but even then they have hardly any intercourse.

The predecessor of the Emperor Francis Joseph was the Emperor Ferdinand—a prince of weak intellect, during whose reign a regular and unvaried routine had been maintained at Court. The year was portioned out between Vienna, Schönbrunn, and Laxenburg, the three imperial palaces, all of them only a few miles distant from each other. All the Archdukes followed this example, spending their winters in old-fashioned stateliness in Vienna, and the summers in the extremest simplicity in their country-houses. This

curious combination is very distinctive of Austrian life, even to this day. When the young Emperor at the age of eighteen came to the throne through an understanding between his mother and his aunt the Empress, his eyes opened on troubled waters, for it was in the midst of the Hungarian revolution; but he was full of hope and courage, and to youth everything seems possible. His chivalrous manners, his kindness and great charm won every heart, and under his impulse the troubles were soon forgotten, and Vienna became gayer than ever. The Emperor loved dancing, and acquitted himself of it with supreme grace and Through many cold winter elegance. nights the windows of the old "Burg" shone with a thousand candles, and the strains of the graceful trois-temps and mazurkas filtered out into the frozen air, and the faithful Viennese rejoiced at the thought that their young Emperor was enjoying himself.

In 1854, six years after his accession, the Emperor married the Duchess Elizabeth in Bavaria, his first cousin. The slight pale girl, barely seventeen, with the marvellous crown of chestnut hair, did not then give the promise of the incomparable loveliness which dazzled Europe for so many years. had been brought up with Spartan simplicity amongst the mountains and the woods of her native country, and she came with diffidence to take the place of the first lady of a society which was known to be the proudest and the most exclusive of the whole world. It has been said that the great ladies of that day discovered a flaw in the pedigree of the young Princess, and, conceiving themselves to be better born than her, made her feel it. This circumstance, many think, accounts for the dislike the Empress has always shown for Vienna and its society. The political events of the Emperor Francis Joseph's reign are too well known to

require repetition; but it is not to be wondered at that a Sovereign who ascended his throne during the terrible Hungarian episode-who, ten years later, was compelled to sign the disastrous Peace of Villafranca; who, in 1866, ended a seven days' war with Sadowa and the cession of Venice, and the year after was doomed to see his brother Maximilian perish in the most tragic and humiliating way, and for whom the utmost limits of grief and shame were reached in the mysterious, incomprehensible, and shocking death of his only son-should bear upon his brow the impress of these storms. (When these lines were written, the cruel, wanton assassination of the Empress had not yet been committed, nor could in these pages allusion be made to the many minor family misfortunes which have at times befallen one of the best of men and most conscientious of monarchs.) The lines about the Emperor's forehead and mouth are very sad, but courage and above all resignation look out of his blue eyes, and now and then, when talking to his children and grandchildren, flashes of gaiety light them up. The highest and the most rigorous sense of duty is the mainspring of the Emperor's character. At his writing-table every morning by five o'clock, he despatches all his business himself, and when the press of work is very great his meals are brought in to him on a tray, and eaten in a perfunctory fashion. I have heard it said that at times the food is not very good; but the Emperor, instead of scolding, simply remarks to his A.D.C: "You are a lucky man; you can go to the club and get another dinner."

After the Crown Prince Rudolph's death, the Empress, who until then had made short appearances at the Court balls, and also assisted at a few dinners given at the "Burg," retired altogether from the world, and the Emperor had alone to bear the brunt of

these receptions. He did so from the first with unflinching courage, his slight, straight figure as erect as ever, and addressing all those present with his usual courtesy and bonhomie. The Empress, whose transcendent beauty and great love of solitude have made her such an object of romantic curiosity to all strangers who visit Vienna, used for many years to give herself up entirely to riding and hunting. fond was she of this latter pastime, that it was reported that a visit to Ireland was the promise held out to her if she would consent to assist at the Court festivities given in honor of some foreign Sovereign. Later on, when she lost her nerve, she carried on fencing with the same keenness, and at last it was mountaineering which claimed her energies. She could walk from sunrise to sundown over the Styrian Alps, refreshing herself only with a glass of milk and sleeping on the fragrant hay in the loft of a mountain hut. The Hungarians were always the preferred of the Empress, she learnt to speak their language, and resided much at Budapest, where, after Count Beust had created the dual system, nearly all the rich and brilliant Magyars had withdrawn. This naturally dealt a great blow to Viennese society, for many of the Bohemian nobles followed suit and went to live at Prague, loudly declaring that their country also ought to be recognized as a separate monarchy.

Viennese society therefore now consists mainly of families belonging to the German provinces and a very few from the other parts of the Empire who have remained attached to the old order. Its numbers fluctuate from two to three hundred. This does not include the diplomatic corps or many high officials, civil and military, who, though bidden to Court festivities, never appear at the smaller social reunions at private houses.

Every winter during the carnival two-Court balls are given. The first one, which is styled "ball by Hof," includes from 1500 to 2000 persons. No invitations are issued for it; a simple announcement that the ball will takeplace is sent to all those who are entitled to go to Court. The second ball is called "Hofball," and to it only theélite of society and the corps diplomatique are convened by a formal invitation. It ends with a supper at small tables, at each of which a member of the imperial family presides, the ladies. of highest rank being told off to the Emperor's table, the corresponding gentlemen to that of the Empress or the Archduchess who represented her. These small Court balls were very brilliant indeed, but quite informal, and no "cercle" preceded them. The young. ladies (Contessen) were generally there in good time, standing in a compact phalanx in front of their mothers, seated on the benches to the right of the throne. "Contess" is the term by which any young lady of rank is designated at Vienna, be she a princess ora countess. On these occasions they were all dressed more or less alike, in very fresh and well-fitting tulle dresses,. with little plush capes identical in shape, but differing in color. them, walking or standing, were thedancing men, all of them officers, with a card and pencil in hand making up their books. Involuntarily one was reminded of a saddling paddock. the "fanfare" announced the approach of the Court, the capes all flew off like a flash of lightning, and were stuffed away under the sofas, on the knees of the mammas-anywhere in fact, all the Contessen faced round in a row and stood ready for the race, which began at once with a spirited waltz.

These balls were given in the largeroom added on to the Burg for the Congress of 1815. The walls are of white stucco, and a row of fine yellow

scagliola columns runs right around the The space between the walls room. and the columns is filled with hundreds of blossoming shrubs, and though the room is not beautiful, it looked very brilliant with its many crystal chandeliers, studded with hundreds of wax candles, and the assemblage I saw before me justified its reputation of being the most aristocratic society in Europe. They certainly all looked gentlemen and ladies, with a great air and good manners, and they moved and stood naturally and with grace. The ladies were covered with fine family jewels in old settings, to which the well-developed expanse of their persons afforded ample room. The men were in uniform, and those in Hungarian costume looked particularly well, and outvied their wives in the gorgeousness and size of the precious stones they wore. The Empress took her seat on a raised sofa, the Austrian ladies sitting on the benches on one side of her, and on the other side were the Archduchesses, Ambassadresses, and any foreign Princess who might happen to be at Vienna. About ten o'clock tea was taken by the Empress at a large round table to which a dozen ladies were convened, and on the return from this we found the cotillon had already begun. It is danced standing, and lasts two hours. The Contessen never show the slightest sign of fatigue. The figures of the cotillon were the prettiest and the best executed I have ever seen, and they were danced with the precision of a military manœuvre. A score of Contessen tear to the other end of the room like a charge of cavalry, and then get back to their places through the most intricate mazes in the nick of time, without ever making a mistake. Strauss's band played with the greatest spirit and entrain, whilst the patient and exemplary mothers on the benches never took their eyes off their sprightly daughters. These balls begin precisely at eight o'clock and end at midnight.

Viennese society is almost one vast family, and there are few belonging to it who are not related to nearly all the Putting official rank on one others. side, their respective positions would come in this order:-The Liechtensteins, being a still reigning family, come first. After them the mediatized princes, i.e. those who at one time exercised sovereign rights directly under the Holy Roman Empire. These have the privilege of intermarrying with royal houses on an equal footing. Thus the daughter of the Duke of Croy has become an Archduchess. The next in rank are the Austrain princes created after 1806. Then there are mediatized counts and also counts of the Holy Roman Empire. The title of baron is almost unknown in this society; it is reserved for the haute finance, and is considered specially Semitic.

In order to be received at Court it does not suffice to belong to a noble family, it is absolutely necessary to have irreproachable quarterings. most curious complications sometimes ensue. A young lady who had always gone to Court, as she belonged to one of the best families, married Count R-, who, though belonging to the aristocracy, was not "hoffühig": that is, he could not go to Court, his mother not having been of noble birth, and his wife had to share his fate. A few years after their marriage, Count Raccepted some official position, and received from the Emperor what is termed a "Handbillet." a letter making him "hoffähig," allowing him to go to Court. His wife, who had the right by her birth was not, however, permitted to accompany him. Imperial "Handbillets," called so because they are written by the Emperor himself, sometimes grant the right to go to Court for life, but often only during official tenure. Many of the ministers and high functionaries spring from the middle class, and though they go to Court they never mix otherwise in society. The one brilliant exception to this rule is that of the late Count Hübner, once ambassador in Paris during the second Empire, and later on to the Vatican, who, though being of humble birth, managed, with the protection of Prince Metternich and infinite patience, tact, and good fortune, to penetrate into the inmost circles.

It is natural that, in a society thus composed, mere wealth counts for nothing, and that the introduction of new elements on this basis would be quite impossible. Daughters of great houses, however numerous, plain, or poor they may be, never dream of marrying outside their order to secure a rich husband. Even if they had the wish to do so, the opportunity would be lacking, as they only meet the men belonging to their set. In some very rare cases the younger sons of impoverished families have been constrained by debt and extravagance to seek salvation in a money marriage; but then they retire into the country or live abroad, as their wives would not be re-Nearly all the great families who compose Viennese society have large means to keep up a good style of living. Those who cannot keep pace with the others retire to the country. Thus a few years ago the head of one princely house was completely ruined by racing, betting, and gambling, and he, together with his wife and children, left their fine town palace and retired to their château in the country, never to be heard of or seen again. Gambling and betting are a great scourge in Viennese society, and nearly all the young men get hit hard at one time or another. The Emperor has been most desirous of stopping it; but in vain, for this passion is deeply ingrained in the blood of the Teutonic race. I am told the gambling in Austria and Germany

is much higher than in any other country. It is, however, only fair to say that, whenever the crash comes, all the friends and relations rush to the rescue to help to the best of their ability. The feeling of solidarity is very great.

Vienna is probably the most expensive capital in Europe for people of high rank, as you pay there according to position. Nobody belonging to society, however badly off, could think of going in anything but a two-horse flacre, the shortest fare being a florin. Most men, whether married or single, keep a flacre, (a matter of three or four hundred a year), irrespective of their own stables. Many ladies use flacres in the evening to save their horses from standing in the bitter cold winds and blinding sleet of a Viennese winter's night. Most newcomers who enter a Viennese drawing-room would probably be struck by the extreme simplicity in the dress of the ladies, and it would not occur to them that to secure these garments, prices are paid in excess of anything in Paris or London. clothes are remarkable for their extraordinary good fit and their exceeding freshness. The girls especially always look as if they had come out of band-boxes, and as if their dresses had grown upon them.

Large dinner-parties are confined to the diplomatic and official circles, but the Austrians dine out a good deal amongst themselves in a quiet, unostentatious way. At some houses a large circle of relations flocks in almost daily, without any particular invitation. The way of living is eminently patriarchal; the large retinue of servants, badly paid, but well cared for, generally all comes from their masters' es-

After all dinuer-parties, even the great official ones, everybody, ladies included, retires to the smoking-room. One's æsthetic sense is rather shocked, by seeing a beautiful young woman,

with bare shoulders and blazing tiara, lighting a big cigar over a lamp. The first thing a man does when he gets engaged is to request leave from his future mother-in-law for his fiancée to Many girls, however, do not smoke. wait for this moment, and anticipate, and there are evening parties of nothing but "Contessen," where the fumes of Havanas have been seen hovering in Until quite lately the usual dinner hours were from four to six o'clock, this latter being quite the latest and most fashionable time, for everybody had boxes at the Burg and the Opera, and these begin at seven and have to be over by ten, as that is the charmed moment at which all who do not live in a house of their own have to be back, unless they wish to be mulcted of the sum of ten kreutzers. Every porter closes his door punctually at ten, and the ten kreutzers are his perquisite. When, some years ago, the question was mooted of putting back the closing time to eleven o'clock, there was a revolt amongst the porters, and the authorities had to give in.

In spite of the pleasure-loving reputation of the Viennese, there are few theatres, and it is only the large subsidies the Emperor gives to the Burg Theatre and the Opera which makes it possible for them to exist. A new ballet or an opera of Wagner's always commands a full attendance, but at a classical play or an opera of Gluck's or Mozart's the house is nearly empty, though the acting and singing are firstrate. The most prominent actors of the Burg are Messrs. Levinsky and Sonnenthal, who to their own individual talent unite a thorough knowledge of At the opera such reprethe stage. sentations as Massenet's Manon with Vandyke and Mdlle. Rénard in the principal parts can hardly be rivalled anywhere. The younger sporting generation do, however, not care for the They like dining late, and

then meet in small sets and play bézique or less innocent games. The men go a good deal to the club, where their conversation is entirely of racing and shooting. The Austrian shoots nearly all the year round, and all his faculties are devoted to this pursuit. He does not mind how much he roughs it or what weather he is exposed to. He is nearly always a good shot, and so are some of the ladies, who often accompany their husbands on their expeditions. Princess Pauline Metternich is a great proficient in this line. The chamois shooting begins in August, and is succeeded by stag and roe-deer, partridge and pheasant, with ground game, all through the autumn and early winter. Then comes the bear and wild boar season, and in February, amongst mountains of snow, the arduous shooting of When this is barely over the hinds. the stalking of the capercailzies be-In order to secure this wily bird at the moment at which he sings his lovesong to his mate at the break of day, whilst she is sitting on her nest. it is necessary to get up between one and two A.M., and to scramble for hours up-hill in the dark. Many men do this for the six weeks during which the "Balzing" season lasts. They live in the most elementary log-huts, existing on the coarsest food, and return to their homes perfectly attenuated.

The only time during which it is possible to count with any certainty on the presence of young men in Vienna is at the time of the races, which begin in April and go on with short intervals all through May till the end of June. This is the really brilliant time of the Vienna season, when the young sporting world come to the capital for a short spell of amusement. Sport of every kind is what really hypnotizes the Austrians, and they are also fond of games, but they are not nearly so adroit or athletic as the English. They are devoted to horses and dogs, and are

good and judicious riders; but the hunting which had been started at the Empress's instigation came to an end when the Emperor withdrew his support, and there is only one private pack of harriers in the menarchy, and this belongs to Count Larisch Moennich. If an Austrian travels, which is a very rare occurrence, it is sure to be in order to shoot lions or tigers, but otherwise they are the most stay-athome people of the whole world. The Austrian loves to be in the open air. The first thing that strikes the foreigner are the numbers of cafés in the They are crowded all the Prater. summer through. There the Viennese shopkeepers breakfast, dine, and sup, imbibing the most fabulous quantities of beer and café au lait, and smoking all the time whilst a band plays a waltz, a czardash, or a march.

There is one aristocratic restaurant in the Prater which goes under the name of "Constantin Huegel," and as long as anybody in society is left it is much frequented in spite of the plague of mosquitoes that infests it. There is no other capital which becomes as thoroughly empty and deserted as Vienna does in the summer. Even the smallest tradesman goes with his family to the country, and the aspect of the broad two-mile-long Prater Avenue under a sweltering August sun, with the accompanying clouds of huge mosquitoes, is the most desolate thing one can imagine. The climate of Vienna is neither healthy nor agreeable and, for those who live there always, rather ex-Whether it be owing to this or the too frequent intermarriages amongst the Austrian aristocracy or the , very small circle of interest bred by the extreme exclusiveness in which they live, it must be conceded that charming, amiable, and kind though they be, Viennese society is pervaded by a great moral indolence and a want of energy and initiative.

Politics, religion, literature, art, and science are hardly ever alluded to in general talk. The Viennese "Salon" (annual exhibition) is far below that of Munich, both in number of pictures and excellence of merit. There are exquisite concerts, but none but the middle-class frequent them. Most Austrians are musical, but they do not cultivate their talent. Occasionally you hear a young man, after a small and intime dinner, strumming, among clouds of smoke, a waltz or galop on the piano. The ladies hardly ever play or sing, and seem to care less for music than the men.

Referring to the constant intermarriages, there is no doubt that they often have most injurious effects, and they ought to be prohibited, especially those of uncles to their nieces, of which there are some examples. Somehow these marriages seem to be less deteriorating to the mind than to the physique, as some of the most intelligent, agreeable, and gifted couples of the Austrian nobility belong to historical families which have constantly intermarried for more than two hundred Love marriages are the only years. unions known at Vienna and admitted. The daughters of great families have small fortunes, for everything is entailed on the eldest son. Beauty. charm, and goodness are the only dower these young ladies bring their husbands. It sometimes happens that a young Austrian chooses a bride in the German Empire or even a foreigner. If the young lady is well-born, well-bred, and simple, she is at once received with open arms. The one thing Viennese society most heartily detests are airs of affectation, and if anybody is suspected of indulging in them it is hopeless for that person to think of getting on. In this peculiarity lies the whole secret of the popularity of some people. Diplomats often do not like Vienna. They have a difficult

part to play, and, especially those who represent Republican Governments are looked upon with coldness and distrust.

Exceptions to this rule are, however, every now and then made in favor of those endowed with good manners, distinguished appearance and a modest, retiring behavior. In a society so closely united by the bonds of relationship, where rank is so clearly defined, every member knows its own place, and there can be no unseemly struggling or pushing, as takes place too often in more mixed communities. Snobbishness is also a thing unknown, for the reverence which Austrians have for good birth can hardly be designated as such. To them it is a law, nay, almost a religion, which if taken from them would make them feel as if they were landed on a quicksand.

Another thing which makes it sometimes difficult for foreigners to get into Viennese society is the language, as German is now almost universally spoken, and the younger generation is not at all proficient in French. The ladies as a rule acquire a smattering of English from their promeneuses, a kind of daily governess, only engaged to take the "Contessen" out walking. Things were very different fifty years ago, when Princess Lory Schwarzenberg was the queen of society. conversation was then carried on in French. The ladies who do so now belong to a former generation, and the type was mainly represented by three sisters, daughters of a princely house who were a power in Vienna. youngest of them, Countess Clam Gallas, held for many years, by dint of her grace, intelligence and kindness, the sceptre laid down by Princess The salon of her elder sister is accounted the most exclusive one of the capital. A score of habitués resort there every other evening, and this illustrious conclave has been nick-

named the "Olympus." To be one of the elect implies that you are at least a demigod. Another clique goes by the name of the "Cousinage," and is formed mainly by the members and relations of the powerful Liechtenstein family. If one of them dies the whole of society is paralyzed for the time being, and to obviate this all mournings are shortened considerably. does not, however, prevent their tears from flowing, for kindness of heart is the fundamental virtue of this society. It is quite enough for anybody to be in trouble that all their faults and shortcomings should be forgotten, and everybody flock around them with proffered help and sympathy.

The one form of amusement dear to every Viennese heart is dancing. The young ladies think and talk of nothing else during the season, and everything is sacrificed to the amusement and wishes of the "Contessen." They are quite the dominant party, though of late a few of the young married women have shown signs of revolt, for they not only come to town, but they actually have the hardihood to dance!

At every ball and party the "Contessen" have a room set apart for them, into which no married man or woman may penetrate. They go to this room the moment they arrive, and if it be a party they are not seen again until At balls the "Contessen" they leave. always move about in bands of six or seven, linking arms. They never sit about with men as other girls do, but the moment the music begins they stand up in rows, three or four deep, for the dancers to choose from. the "Contessen" are very numerous, their partners are not allowed to take more than one turn with them, so as to give the less popular girls a chance. After every dance there is a stampede for refreshments, which stand about on different tables in nearly every room. At supper the young ladies develop appetites only to be compared to their endurance in the dance. Quite different is the fate of the devoted mother. If once she succeeds in capturing a chair in the ballroom, no blandishments of any kind, no hopes of whist or pangs of hunger, will ever move her again. She would rather die than miss seeing how many turns her Finny takes with Sepperl T—, and how many more bouquets Fannerl S— gets than Mimi L—.

The "Contessen" have an enchanting time of it before they marry. dance, they ride, they smoke, they shoot, they go to races, they have expensive hats and frocks, they eat as many sweetmeats as they like every afternoon at Demmel's shop; in fact, there is nothing that they wish for which is refused to them. They sometimes have the appearance of being very fast, but the moment they marry they become the best and the most devoted wives. Without a regret they follow their husbands into the country, and often only reappear again when they have a daughter to bring out.

It strikes strangers as very curious that girls brought up in severely religious and strictly moral households should be allowed to go to every race for weeks together. Such, however, is the case. In freshest dresses of latest fashion the "Contessen" crowd. together in the passages and on the steps of the grand stand or walk about in bevies in the enclosure.

Society flocks to these races in great numbers. The weather is generally fine in May, and the racecourse, which lies between the greater and the lesser Danube, is a pretty one. Most of the men and some of the ladies bet very heavily. For those who wish to be moderate the totalisateur is an easy solution. Many of the great bankers and merchants go to these races, accompanied by their wives, but there, as everywhere else, the separation from

the society of which we treat here is absolute. The return from the races is one of the sights of Vienna. long Prater Avenue is filled with carriages, three or four abreast, most of them horsed with very fast Hungarian "yukkers," tearing and careering along as fast as they can lay legs to the ground. The coachmen hold the reins in two hands at arms' length, shouting, laughing, and splashed from head to foot, which is supposed to be the acme of chic. In the evening the racing set meets again at drums and dances, given at some hotel, but here young ladies are excluded.

Though nearly every great family has its palace at Vienna, few of them entertain, but picnic balls are very much the fashion. They are so popular because everybody can do as they like, and that is what suits the temper of Viennese society. The finest private balls are those of the Marquis Pallavicini, a rich Hungarian magnate, whose handsome wife, wreathed in priceless jewels, receives the Court and society in spacious and profusely gilt halls. The Harrach and Schönborn palaces are renowned for their beautiful and costly appointments, dating from the days of Maria Theresa, whose prosperous reign gave a great impulse to architecture, and there is little that is good in Vienna left of an earlier date. People who do not possess houses of their own live in flats. As they never receive, it is difficult to penetrate into these apartments, unless you are a relation or an intimate friend. casual visitor is ever admitted, which, I imagine, accounts a good deal for the strict morality of society. cuse always given by the servant who opens the door, no matter at what hour of the day, is that the lady is at her toilet. The Ambassadresses, the Mistress of the Robes, and the wives of one or two high officials have days, but if anybody else presumes to take one

they are considered forward. Amongst themselves the Viennese are in and out of each other's houses all day long. However occupied a married daughter may be, she is supposed to find time to visit her mother during the day. Whenever they meet, even at a dinner-party or a ball, the daughter respectfully kisses her mother's hand. This holds good in the case of aunts and nieces, and indeed nearly all the girls would kiss the hand of the lady to whose house they go, if she were a relation or an intimate friend of their mothers.

All the women, of all ages, address each other with "thou," and for the men the rule is the same. In the army it is even made obligatory. A girl writing to an older woman would begin her letter thus:-"Honored Princess,-Mamma hopes thou wilt," &c. If there is a shadow of relationship, men and women always use the "thou" in speaking to each other as well as Christian names. If a lady of a certain age and rank shakes hands with a man, he always kisses it as a sign of respect. Everybody is called and addressed by a diminutive or nickname which is utterly bewildering to a stranger, and the general topics of conversation being family affairs and purely local gossip, carried on in Viennese jargon, it is utterly incomprehensible to the uninitiated.

The Austrians bring up their children at home. The sons have tutors till they go to the University or into the army. This latter profession, diplomacy, and internal administration are the only careers open to young men of good family. Abbés are not, as in France, tutors in families, and the clergy play no part in social life. Except occasionally some cardinal of high degree at a dinner-party, no Church dignitary ever appears in society. The Austrian ladies are strictly religious and severe in the observance of Church rites. It

would be impossible to give dinners on Fridays, as is done in Italy, for all the women fast. The men, though less bound by forms, are extremely respectful in their attitude towards re-This example is set by the ligion. Emperor, who at Easter, before the assembled Court, washes on his knees the feet of twelve old men, and at Corpus Domini walks bareheaded through the streets of Vienna accompanied by all the great dignitaries of the realm, and devoutly kneels before the many altars erected on the way. In former days the Empress and all her ladies joined in the procession, in full Court dress, with their diamonds glittering on their hair, and bare shoulders and arms, and those who remember this say it was a sight worth seeing.

A great deal is done in Vienna for There are many practical the poor. and widespread organizations, headed by all the great ladies. The number of charity balls during the carnival is something appalling. At these festivities the lady patronesses sit on a raised dais, and one or two of the Archdukes grace the entertainment. The dancing public consists entirely of the middle The prettiest ball of this kind is the artists' ball, which is always in fancy dress. The walls of the spacious rooms are every year decorated in a new way with great talent and skill. Sometimes they represent Alpine scenery, at others the bottom of the sea, a tropical region or a mediæval town. Painters, sculptors, musicians, poets, actors, architects, and engineers are to be seen there with their families in picturesque or comic disguises. The week after this ball has taken place a public sale of all the decorations, ornaments, furniture, &c., takes place, and often the things go for fabulous prices. They are all clever imitations of real objects, and are called in Viennese dialect "gehnaas."

Princess Metternich, a lady of ex-

traordinary wit, prodigious energy and resource, sets every year some charitable scheme on foot when the spring approaches. Sometimes it is a *fête* in the Prater, sometimes an exhibition or *tableaux vivants*. The proceeds go to the hospitals and the poor.

The inclination to remain at their country seats gains ground very much with the Austrian nobility. In spite of this, few of them are good administrators, as their native indolence and easy-going disposition prevent them looking into their affairs. Sport fills up all their time. They are not great readers, nor do they take the slightest interest in what happens in the world at large. Even the affairs of the Empire sit very lightly on their consciousness. They live contentedly in the midst of their large family circle, in comfortable but unpretending affluence. Intimate friends are always welcome, but invitations are seldom extended to mere acquaintances, an exception being, however, made for those English who come to Austria in search of sport which their own country does not offer. They are always most hospitably received.

The Nineteenth Century and After.

It is difficult for anybody who has not lived in it to imagine a society of this stamp, and those who only see the outside of it are apt to form a wrong estimate. The extraordinary exclusiveness of the Austrian aristocracy is not a matter of pride: it is one of habit. The people who compose the second society would not wish to enter the first, as they would not feel at home in it, and the rare artists and literary men who sometimes are asked to great houses are more bored than flattered by these attentions, as it obliges them to don evening clothes and tears them away from their beloved pipes and Pilsen beer.

Prejudiced as many may be in these go-ahead times against a society so narrowly restricted, there is nobody who, once having passed the charmed boundary, does not appreciate the lovable qualities of those that form it; and whatever changes years may have wrought in its outward forms, the intrinsic qualities must remain, and they are most attaching, for they consist of kindness of heart, purity of life, frankness, and extreme simplicity.

Walberga Paget.

A CLASSICAL EDUCATION.

There is undoubtedly a good deal of dissatisfaction abroad at the present time about the methods and results of secondary education. Many parents are found to take a strongly utilitarian line of comment, and to say that a boy who has been through a public school and a university is, as a rule, entirely unequipped to fight the battle of life. Boys themselves, in so far as they have any thoughts on the matter at all, seem inclined to take the same view. They tend to complain that they have no practical outfit for life, and at the same time they are not conscious of having

any particular intellectual interests; or if they have intellectual interests, they are inclined to maintain that they have arrived at them in spite of, and not through, their education. Meanwhile schoolmasters, as a rule, tend to take a strongly anti-utilitarian view; as a prominent educator said to me the other day: "We are not so much fighting for the classics as against shorthand!"

On the other hand, the public schools certainly enjoy a considerable popularity, in spite of the criticisms so freely made upon them, even in spite of the grumbling of parents; lists are full to overflowing; and very few fathers. in spite of their animadversions, show any signs of preferring that their boys should be privately educated. Every one seems to be agreed that the public-school type is a wholesome and manly though not an intellectual, type, and that, though it is generally necessary, at the end of an elaborate education, to provide boys with a special preparation for some practical line of life, they tend as a rule to do well in the world.

Moreover it is clear that the dissatisfaction which appears to be felt with the type of classical education prevailing at most public schools is not by any means universal. A strong attempt was lately made at Cambridge to displace compulsory Greek from the curriculum; the idea was, no doubt, to attempt to modernize education in a practical form, and to simplify the congested curriculum of the schools. But this proposal was rejected by a large majority; the voters being members of the University drawn from all classes of the community, and presumably, in many cases, parents who undoubtedly believed that the best interests of education were hereby endangered.

The object of this paper will be to discuss the merits and demerits of the classical system from the point of view of one who for nearly twenty years held a classical mastership at a leading public school, and to indicate improvements that may seem desirable or possible.

The defenders of the classical system have two main points upon which they rest their case. They maintain that, in the first place, classics provide the best gymnastic for the mind, and cultivate lucidity of thought and intellectual vigor. They say, in the second place, that the classics introduce boys to the best and most permanent literatures in the world, and are thereby the best vehicles for communicating liter-

ary taste, intellectual interest, and liberality of mind.

To take these points in order, it may, I think, be fairly maintained that for boys of definite linguistic ability the classics are an excellent vehicle of instruction. Greek and Latin are languages which provide an excellent Greek is perhaps the most contrast. elastic medium for the expression of thought that exists. Its grammatical rules are simple, and at the same time it lends itself with wonderful facility to the unconstrained expression of complicated thought. Latin on the other hand is the severest and most logical of languages; its rules are complicated, but it is absolutely exact. Its structure is firm, rational, and invariable. We have then, it may be conceded, two admirable educational vehicles ready to our hand in these ancient languages.

To take the second point, the value of the literatures of Latin and Greek: there is no sort of doubt that anyone who has a mastery of Greek literature has a mind capable of entering into the subtlest literary effects. To name but a few Greek authors, we have in Homer the perfection of transparent simplicity, in Plato the most delicate charm. Sophocles is a master of statuesque purity, Æschylus of sublimity; Aristophanes shows a combination of almost unequalled humor with flashes of high poetical conception; Thucydides is pre-eminent for terse and graphic description; Xenophon a model of narrative interest, while the Greek Anthology contains some of the most exquisite poetry that has ever been produced.

To turn to Latin, we have in Virgil a treasure of the purest romantic poetry, in Horace a finished crispness of expression, in Livy an abundance of felicitous, romantic prose, in Cicero an easy elegance, in Tacitus a brilliant display of antithetical and epigrammatic style. There is of course no com-

parison possible between Latin and Greek literature; but the fact that Latin is interwoven with the very fibre of our own and kindred tongues, constitutes a solid reason for making it a subject of study.

Thus we have a strong prima facie case for continuing to use these languages for educational purposes; and there is, moreover, a not inconsiderable practical reason as well, namely, that the apparatus both of books, and of classically trained teachers, is elaborate and complete.

At the same time it is certain that, for some reason or other,-a point which shall be discussed later-the net result of the teaching of these languages is very small. Boys of ability, or rather of definite linguistic and literary ability, do certainly profit by their classical education, and are turned out both capable and intellectually interested. But this is a small percentage, and may be said to be represented by those fairly who take classical honor degrees at the universities.

The case is far different with the average boy. He leaves the university with no real proficiency in either Latin or Greek; he cannot as a rule make out the sense of a simple passage in either language; he cannot write the simplest Latin or Greek prose without a great crop of mistakes. A boy who has given, say, twelve years mainly to the study of two languages, ought surely to be able to use them with moderate facility; but it cannot be pretended that he has as a rule any mastery of either.

Then, as to literary appreciation, I can only say that my experience is that the average boy has no conception, when dealing with Greek and Latin, that he is in the presence of literature at all; he cannot discriminate style, he cannot relish the simplest literary effects. The veil of the unfamiliar lan-

guages hangs heavily between him and the thought.

Now the essence of a training in the language and literature of a nation is to give a sense of intellectual perspective; the insight which is given into the occupations, the habits of thought, the point of view of other nations, saves us from being narrow-minded, limited, and provincial in view. But I never had any evidence that the average boy entered in the least degree into the Greek or Latin spirit. He had never reached that stage. He was kept kicking his heels in the ante-room of lan-The short lessons,-twenty or thirty lines of Latin or Greek-the necessity of committing to memory abstruse grammatical forms, the composing of prose and verse in an unfamiliar medium; these things, however valuable in themselves, effectually prevented any mastery or breadth of view.

Then, too, the steady tendency to introduce modern subjects into the school curriculum has thrust the classics into a corner,—a large corner it is true, but still a corner. When a boy has to learn divinity, modern history, geography, French, science, arithmetic, Euclid, and algebra, as well as classics, it cannot be pretended that classics have a fair chance. And yet the proportion of time allotted to classics makes it impossible for any real progress to be made in these modern subjects.

It is clear then that some simplification must be attempted. The bag is packed fuller than it can hold. If it is determined to make classics the chief vehicle of education, then classics must be given a fair field; modern subjects must be resolutely excluded. History and geography must be kept severely classical; science and mathematics must be sternly curtailed.

Moreover, in the case of boys of average ability, who are to learn the classics thoroughly, a different method of teaching must be pursued. Composi-

tion must be largely dropped, retaining only Latin prose, as a training in logical expression and precision. Pure grammar must be to a great extent given up; the long lists of anomalous forms, of rare occurrence, must be set Certain lessons must still be learnt in minute detail, with careful attention to structure and syntax; but books must also be read in large masses, and a vocabulary acquired; and boys must, at all costs, obtain an insight into the logical order of Greek and Latin thought, so that the arrangement of sentences shall no longer be a barrier to the comprehension of them. A boy thus educated might hope to have at least a certain mastery of the classics; he would be able to read them without the assistance of a crib; he would have some knowledge of ancient conditions and modes of thought. He would at least feel that he knew two subjects well, instead of a great number of subjects in a slipshod manner.

But the question is, is the above programme a practical one? and I would unhesitatingly reply that it is not. Upon no theory of education, except one of remote ideality, can it be maintained that, at this juncture of the world's history, it is right to keep boys in entire ignorance of modern conditions. In this age of universal expansion, to leave boys unacquainted with the movement of modern history, with the geographical conditions of the world, with the tremendous discoveries of science, with modern literature, with modern thought, is little short of gro-It must be kept in mind that the majority of the boys who go to public schools will have very little time in after life for completing their edu-No doubt all or most of these modern subjects are accessible to people of leisure and of real intellectual eagerness. But it cannot be contended that most boys, after leaving school, will have the opportunity of pursuing

the study of modern history, the ramifications of science, the sociological or economical questions which concern the race, the treasures of literature that exist in our own language, to say nothing of other modern languages.

I was myself at school in days when education was even more severely classical than it is at present. completed my technical education at the age of twenty-two I was a moderate classical scholar, and I can only say that it gradually dawned on me, with a species of dismay, how entirely uneducated I was. The whole range of modern interests was, so far as my education had gone, a sealed book to me; and I cannot honestly say that I think that this ignorance was compensated for by a shallow knowledge of the conditions of Greek and Roman life, and a certain literary facility in the use of classical languages.

My own belief is that education needs reorganizing on much simpler lines. Up till the age of fourteen I should like to see boys educated on purely modern subjects, French, history, science, biblical knowledge, arithmetic. After that date I should like to see a considerable measure of specialization introduced. It would by that time be possible to see where a boy's aptitude lay. Boys of real linguistic and literary ability could then proceed on classical lines, or study modern literature scientifically; boys with an interest in subject-matter, as apart from language, would take up history; boys with scientific or mathematical tastes would proceed to study science or mathematics; and boys who had no special aptitude would continue the simple course which they had

But only a certain degree of specialization would be permitted; and I would take care that a good general education should be at the same time attempted, so that no one should be

ignorant of modern conditions or of the vast extension of knowledge and discovery that is taking place.

The obvious advantage of this type of education would be that boys might at least hope to be interested in the subjects they were doing. My own experience indeed convinces me that classics are a subject that do not make at all a general appeal; and that there are even boys of linguistic and literary gifts, who are capable of appreciating literary effects in their own language, and even in contemporary modern languages. who are not capable of appreciating classical effects. It might be that a change of methods might produce an effect, but though I think that the circle of those to whom the classics might appeal would probably be widened, yet I do not believe that it would be more than slightly widened.

But in any case the need for experiment is absolutely imperative. There is no doubt that the present system of classical education produces a large number of boys who are types of intellectual debility, and who are moreover cynical about all intellectual things. It is not just to assume that this would be the same whatever might be taught them, until the experiment of greater elasticity has been tried and failed.

An argument that is frequently urged by schoolmasters against the introduction of English as a school subject is really the strongest condemnation of the existing system and its methods that it is possible to frame. They say, in so many words, that it would be unwise to teach boys English in school because it would spoil their enjoyment of it; and yet this is urged by the same men who urge the retention of the classics because the classical literature is of so august a type. If English would be spoiled by educational processes, then surely it is a conclusive argument against what is practically poisoning

the source of intellectual enjoyment. If our educational methods would ruin the boys' enjoyment in the master-pieces of English literature, it may be urged that it is still more unfair to submit to the same process the most magnificent products of the human mind.

It is true that schoolmasters cannot be the first to move in the matter. The movement must originate from the universities. So long as classics are compulsory there, so long must the studies of boys intended for the universities be principally directed to classical subjects. But I have never heard the most ardent defender of compulsory Greek defend the pass examinations of the universities. It is admitted that the standard is deplorably low, and that these examinations are models of slipshod and desultory processes. But if the universities could introduce a greater elasticity, a greater choice of subjects, they could also demand a higher standard.

One of the causes of the present discontent is that the direction of education tends to fail into the hands of men of high intellectual ability, men who are by the nature of their own intellectual equipment almost incapable of sympathizing with the difficulties of the immature and average mind. Men whose mental grasp is sure, and whose memory is exact, seem often to have no conception of the mental confusion which results from the attempt to teach boys of limited mental range two hard and unfamiliar languages simultaneously.

The perception of this came to me in my professional days, when I had to teach classics to a division of willing, industrious, but unintelligent boys. I found that it was possible, in teaching Latin prose, for instance, to get a grammatical rule, such as the rule of sequence, into their heads; and after we had done a number of examples,

they could reproduce the rule with fair fidelity. But when a day or two later we came to deal with Greek prose, they applied, with pathetic zeal, the rules of Latin usage which they had learnt a day or two earlier. The difference of usage was then carefully expounded to them; and by the end of the hour they had to a certain extent mastered the Greek constructions. The following week, when we came to our Latin prose again, the Greek usage was diligently applied; this again was exorcised; but the same melancholy process used to repeat itself week after week, until I realized that the minds with which I was dealing were literally incapable of distinguishing with any exactness between two sets of usages which were in a sense so similar, but yet so essentially different.

And lastly I would say that though I do not at all desire that education should become a purely utilitarian thing, it has a utilitarian side which we dare not neglect. It is absolutely necessary that parents and boys alike should have an active faith in the usefulness of the education communicated to them. It ought not to be necessary to attempt to prove by argument and demonstration that boys, at the end of an elaborate system of education, are equipped with mental vigor and practi-Any education which cal capacity. does not produce this result is self-condemned; and it must be admitted, however unwillingly, that the education of public schools does not at the present time tend to develop these qualities in the majority of boys. The reason largely is that very few boys or parents,-and indeed by no means all schoolmasters-have any real belief that the subjects taught, or the methods employed, are likely to produce

such intellectual fruit. It is essential, then, that before everything confidence must be restored. Boys and parents must be persuaded to believe in the usefulness of education. It rests with the schoolmasters to see that education does not degenerate into a purely utilitarian thing.

As for the general retention of the classics, though I recognize with all my heart the magnificence, the perfection of the ancient literatures, I cannot subscribe to the opinion that modern subjects, history, geography, science and modern literature have no possibilities of intellectual stimulus in them.

The Greeks themselves drew no cultivation from any sources exterior or anterior to their own national life; and yet we see developed in them the very intellectual spirit that we so earnestly desire to produce.

And finally, whatever system we adopt, I would plead that it must be adopted whole-heartedly and in its entirety. If the collective wisdom of the nation dictates that the staple of education should be classical, then let it be really and truly classical. What we are at present suffering from is an attempt to compress into a few brief years of boyhood a confused and desultory mixture of two or three systems; I for one should deplore it with all my heart if the reactionary spirit I feel with an intensity, prevailed. which I am hardly capable of expressing, the absolute necessity of putting boys in touch with the thought of our own wonderful age; but if that is impossible, if we must continue to educate upon traditional lines and upon remote literatures, then at all events let us see that they have their perfect work.

Arthur C. Benson.

Macmillan's Magazine.

THE LEGEND OF RODDERBURG.

The July sun, which had beaten mercilessly on the dusty road all day long, had sunk out of sight at last.

In the white hotel, as each row of green-shaded windows passed out of the glare, the blinds had been thrown open. Even a tiny pane from an attic window had given its last reflected signal to the weathercocks on all the distant spires.

Across the stream the hills were turning from a deep purple to sombre black, and the gentle breeze which had arisen was just strong enough to cause the faintest ruffle on the river as it swept by.

Rolandswinter on the Rhine is greatly favored; each evening about sundown the wind springs up from some direction or other, and tiny ripples splash the shore. Then all the willows which line the bank for a mile below the village begin to wave, adding their rustling to the other mysterious sounds of approaching night.

On the hotel terrace it was becoming deliciously cool. The two men seated at a table overlooking the road heard nothing, however, of the lapping water or whispering branches. The Hungarian band which struck up as soon as the sun dropped behind the horizon, drowned the sounds most effectually. Besides, they were discussing the second course of an excellent dinner. is generally after the last course, under the influence of coffee and cigars, that we incline our ears to such romantic sounds as rippling waves and rustling leaves.

Kurt von Francken and Camille de St. Vith were sitting amicably opposite each other, as if St. Privat and Sedan never had been fought. Thirty years had closed the breach so far as the two friends were concerned, and 1870-71 had been forgotten. It was perhaps just as well for their friendship's sake that neither had come into the world for several years after that terrible struggle was over.

"No!" von Francken was saying, in answer to a question, "the volcano which caused the upheaval of the Seven Mountains is supposed to have been in the bed of the stream. Geologists are of opinion that the hills are much older than the river. There is a volcano, extinct or otherwise, over yonder," he said, pointing across the water to a round mass, just visible in the gathering darkness. "Some think it to blame; but it seems hardly high enough, and a very harmless mound it looks, when one is up there."

"Why so audiguous?" asked the Frenchman. "What does extinct or otherwise mean? Mon dieu! I hope we are in no danger. The thing looks uncomfortably near," he declared, turning in his chair.

"It occurred," said von Francken softly—almost as if speaking to himself—"before I left the Service, We military men, naturally, took a great interest in the affair. An interest quite apart from that of the learned. I am sure that a great many of us would have been willing to go through the ordeal for the sake of the reward."

"Well." said St. Vith, rather impatiently, "go on; what occurred? Did it burst out again, or what?"

"Wait until after dinner," said his companion. "I will satisfy your curiosity then, and tell you the whole story, or as much of it as is generally known."

It was getting late, and the terrace was emptying fast. The two men were almost alone now. A distant clock chimed the hour. "Ten!" said von Francken, mechanically taking out his watch. "For whom has that table been set, I wonder?"

A grave-faced waiter was putting the finishing touches, and arranging cut flowers on a table a little way off. By its side stood a wine-cooler, over the edge of which the gilt neck of a champagne bottle peeped invitingly.

"Late guests," muttered the German wisely, in answer to his own question, proceeding to light a match, which he held to a cigar of huge dimensions.

St. Vith quickly followed suit with a diminutive cigarette. The men puffed in silence for some minutes.

"It seems a suitable time for your promised legend," observed the Frenchman after a while. "But hark!" he said, suddenly holding up a hand, "what was that?"

A slight sound came over the water, a sound suggestive of rapid motion.

"A launch!" he declared, peering out.
"I see her lights now; she is bound here!"

Von Francken started. "It would be a coincidence, just as I was about to tell—Mein Gott, here they are!" he exclaimed excitedly, as a naphtha launch appeared suddenly out of the darkness, and laid-to at the miniature jetty below the hotel.

The Frenchman's attention became riveted in an instant. A female form stepped on to the wharf, and stretched out a fair hand to a seemingly crippled figure in the boat. Dressed all in white as she was, and with her extraordinary blonde hair, she might have been some mermaid arisen from the river depths. St. Vith's thoughts instinctively turned to the Lorelej. He wished himself the "Fischer im Kleinen Schiffe."

Behind in the boat with the steersman, supporting and guiding the other passenger, was a smartly-dressed soldier-servant. The band had ceased playing. Hush! she was speaking. A soft voice it was, such as one would have been led to expect. Now they were on the quay together, and she was giving the cripple her arm, while the servant followed at a respectful distance.

"Dead lame!" murmured the Frenchman, with a sigh of sympathy, "and a good-looking fellow enough," he went on. "Who are they, do you know, Kurt?"

"That," answered von Francken slowly, "is Lieutenant Schmitz, late of the Prussian Field Artillery, and the fair-haired girl is his wife, Frau Schmitz."

"Good Lord!" returned the Frenchman, "that rather knocks the romance out of it."

"Wait a bit," said his friend, "Frau Schmitz now; but born 'Comtesse Gabrielle von Rodderburg.'"

"Come! that's better," retorted St. Vith, "but how the—" he continued, lowering his voice, as the new-comers took their seats—"how did she, that peerless beauty, ever get such promotion? Frau Schmitz—and a crippled husband!"

"If you can manage to take your eyes from her for just one second," answered his friend, "I will tell you their story. It is not a long tale; but I think you will perhaps change your opinion about Schmitz before I have finished. You may, I give you permission, have just one more look. See how she gazes across at him. Is that a glance of love, or is it pity? They are so near akin, I hardly know.

"You may not believe it, Camille, but three years ago, that man was a goahead artillery officer. The manœuvres were held that autumn in this district, and Schmitz was billeted for one night at the Rodderburg. In this 'burg,' as it was called, lived, with an elderly aunt to care for her, the Comtesse Gabrielle. The house was at the foot of the crater." The Frenchman gave a slight start.

"Yes, it is queer; but, as I said before, the place looked innocent enough, with its sloping green fields, clumps of trees, and the old red-tiled buildings in the centre of it all. The only things noticeable are the tell-tale rim which encircles the basin, and the occasional blocks of volcanic rock, which keep cropping out in the most unexpected The old house was built entirely of lava, as is indeed the modern mansion. As I have said, Schmitz was quartered there for a night. It was late in the evening before his men had been properly provided for in the village, and he was able to start with his servant for the Rodderburg. The darkness was intense, and, to make matters worse, after passing the brow of the hill the riders found themselves enveloped in a fog-bank, thick as the proverbial wool on a sheep's back. As the stable was some distance up the hill, in their wanderings they struck that There the Bursche was informed that he was to sleep, and a groom took the horses, and pointed out the road to the house.

"Schmitz had never met his young hostess, although he had heard a great deal of her. She was called the proud Gabrielle. However, her pride was not to cause him any suffering that evening. The Comtesse had an anxious look on her haughty face. She was frightened, and fear is a great leveller. Indeed, she was rejoiced to have a man in the house that night, even if he were only plain Lieutenant Schmitz of the Artillery.

"All day the household had been in alarm. At six o'clock that morning, one of the maids on drawing a bucket from the well, had been astonished to find the contents steaming hot. Since then, all the water had been fetched from a spring in the mountain side, more than a mile away.

"The Comtesse was greatly agitated, and after supper requested Schmitz to go with her on a round of inspection. Consequently they visited the scene of the disturbance together. Not a breath of air was stirring; but the fog seemed to have lifted. A slight cloud of steam was rising steadily from the well, and hung suspended, like some great mushroom, over the whole valley. Strange bubbling sounds issued out of the blackness. Sounds as of water boiling, and a faint odor of sulphur greeted Gabrielle and her companion as they peered over the edge.

"'Evidently a new sprudel, Comtesse,' said Schmitz, laughing confidently. 'You will have to change the name to "Bad Rodderburg" now.' But Gabrielle was still frightened; so he soothed her by saying that, since it was only water they had to fear, there was no danger whatever. His manner reassured the Comtesse. They returned to the house, and all was soon enveloped in darkness, only the cloud which hung over the crater was increasing in density; nor was there any diminution of the bubbling sound in the well. The boiling water was slowly but surely nearing the surface.

"Now!" said von Francken, "you may take a look while I order that other bottle."

St. Vith turned just in time to see the pale man raise his wine-glass to the lady seated opposite, and noticed by the light of the electric lamp at her side how she leaned over towards him, her fair hair almost touching his fore-head. He could even see, at that distance, her lips part in the smile, with which she acknowledged her husband's little act of gallantry. The Frenchman was actually becoming furiously jealous of the poor crippled German officer.

Kurt, noticing something in his friend's face, gave a short laugh. "You are not the only one, Camille; not by any manner of means, mon cher?" he said, with something that closely resembled a sigh.

"Between two and three in the morning Schmitz was aroused by a timid knocking at his bedroom door. have said that, under the circumstances, he should not have gone to bed at all that night. But as the poor fellow had been in the saddle since daybreak, it was not a very unnatural pro-Besides he was persuaded there was no danger. Now, with deep misgivings, he rose hastily, and throwing on some garments, opened the door. The young Comtesse stood trembling in the passage. Over her shoulders, in haste, she had wrapped a white dressing-gown, and very beautiful I have no doubt she looked with her golden hair all in disorder from the pillows. Her maid described her as looking like an angel. At the same moment a great shouting was heard from the outside. Then the aunt appeared on the scene, not in such a prepossessing fashion as her niece, we can be sure.

"'There is a veritable lake of hot water all round the house,' said poor Gabrielle, almost sobbing. 'It is rising fast, and we came to you for advice.'

"Schmitz was himself in an instant. He sprang to the window, and threw it open. Clouds of steam, which almost drove him backwards, poured in through the open casement. The shouting still continued. It was the voice of Max, the Bursche, calling from the hill-side.

"'Max?" roared Schmitz through the vapor, 'come to the house, if the water is neither too deep nor too hot, and take the maids to a place of safety.' The words 'Ja wohl, Herr Leutnant?' boomed out of the fog, and a sound of splashing feet showed that orders were being obeyed. 'Not very hot, and still shallow,' came the voice once more.

"Fully twenty minutes after Max

had brought the maids on shore, where they sat shivering and wailing with fear, Gabrielle's aunt appeared on deck, as it were. This time equipped in bonnet and shawl, and some say with an umbrella tucked under her arm. In the passage, fully dressed, and waiting impatiently, were Schmitz and Gabrielle. Repeated entreaties on his part to let him take her first had failed, the old lady's security was uppermost in her mind.

"The water was beginning to seethe below in the cellar, it could be distinctly heard from where they waited. Neither of the ladies could possibly wade in such a temperature. Would the big riding boots serve for the two trips before him?

"The air was hot in their faces as they reached the main door. The wind had risen, and cloud upon cloud of steam poured over their heads. Peering anxiously through the rolling mist they could see the faces of the spectators on the bank. Twice Max attempted to go to the rescue, but was ordered back by his master. He must be kept in reserve, in case Schmitz himself failed. Just then Gabrielle stooped and touched the water with her hand, but drew it back with a cry of dismay. 'It is hot! hot!' she cried, realizing perhaps for the first time their danger.

"It was the turn of Schmitz now. All hope that the water would subside had vanished. Without another word he raised the terrified old lady in his arms, and with great strides began plunging towards the shore.

"Now comes the pitiable part of the story. His face set and white as a sheet, Schmitz returned through the almost boiling-water. From the bank they could see Gabrielle, as if in despair, remonstrate and wring her hands. Her fingers were raised to his lips, once, twice, and then the terrible ordeal began. Schmitz stepped knee-

deep into the scalding fluid. The saturated leather was hardly a protection now, and the water poured in over the boot tops as well.

"Bravely he struggled on, she comforting and blessing him all the way; calling him her brave hero, hiding her face in his shoulder, and entreating him to drop her so as not to prolong the agony he must be suffering.

"By the time he set her down and cast himself as if dead on the ground the water was boiling and hissing as if in some huge caldron.

"Max ran to the village for help, and the women removed the bleached riding boots. . . . You won't care to hear about that. Then for two long hours until the stretcher arrived Gabrielle held Schmitz in her arms, moaning and sobbing over his half unconscious form as a mother would over an injured child.

"As if in derision the tottering house took fire, and during that terrible time they witnessed its destruction, and in the end saw it fall hissing into the boiling lake. Now, only a heap of lava blocks marks the dwelling-place of Ga-

Temple Bar.

brielle von Rodderburg. By noon that day not a trace of water was to be seen. Even the well was dry, and has remained so until the present time. And the sequel? Well! you have seen what you have seen."

"Both feet gone?" asked the Frenchman, in an awestruck whisper. His friend nodded.

"Artificial," he said. "See, Max has arrived with the wraps. Yes, that is the very man; they are going now!"

It was after midnight. The tired musicians were packing up their instruments. All was silent, only occasionally the soft tones of a woman's voice could be heard, and the shuffling movements of the cripple, as the party made its way laboriously down the stone steps.

Now the reign of water and willow was at hand. All nature had given way to the night, and the launch disappeared into it as it had come—suddenly.

"That is the legend of the Rodderburg," said von Francken, rising to his feet.

Francis E. Romanes.

THE PEACE.

As usual, the unexpected has hap-Throughout the negotiations pened. in America we have steadily maintained that the Czar, as head of a great military Monarchy, could not with half-a-million troops in the field appear to buy peace from the Japanese, and have from that primary fact drawn the deduction that the Conference would be futile. It never even occurred to us that the Japanese Government, with its habit of persistence, its astounding successes both by land and sea, its belief that the next battle would be a supreme victory, and its

desire for a large sum of unborrowed money, would consent to withdraw the claim for the costs of the war. Plenipotentiaries at Portsmouth had evidently received no hint of the kind, for they were prostrated with grief at the final decision, and had left on the mind of M. Witte an impression that they were, as he himself said, as immovable as images. It may be doubted, too, whether the Japanese Press would have been quite so unanimous in supporting the indemnity if they had not believed that the decision to demand it was that of the Mi-

kado and his Government. At the very last moment, however, the Emperor and his most trusted advisers, the "Elder Statesmen" as they are called, who in a single generation have made modern Japan, decided that it was wiser to forego the indemnity, and the agreement which on Saturday last had been "impossible" was on Tuesday reached. What the governing motive at Tokio was which finally overbore even the reported counsel of Marshal Oyama has not been revealed. The Emperor may have been, as he has been repeatedly reported to be, sick of the war and its enormous sacrifices, and inclined, in the future interest of Japan, to offer to the civilized world an irresistible proof of Japanese moderation and freedom from outrecuidance. It may have been that the British Government, which has just been settling the conditions of an extended Alliance with Japan, had offered guarantees conditional on a speedy peace which seemed to the "Elder Statesmen" better security for the future than even financial relief. Or it may have been that the great financiers of Europe and America, who dread above all things the crash in France which would follow a suspension of payments in Russia, had applied pressure which it seemed to the managers of Japanese finance folly to defy. In any case, the motive sufficed, and peace was made, the Japanese statesmen displaying once more in making it the marvelous far-sightedness, self-control, and confidence in the acquiescence of their own people which have from the first marked their action. They have refused to be blinded by any glamour of glory; they have reckoned up the chances of what Japan might suffer if Russia, with Linevitch defeated, should still refuse peace, and wait behind the shelter of the Khingan Mountains for the events of perhaps twenty years; and they have perceived what Europe has still to realize, the

immense value of the triumphs they have already gained.

It is in those triumphs that their real gain consists, rather than in any material advantages, though these are not to be despised. They become under the Treaty masters of Korea; that is, they have added to their Empire a territory equal to nearly half all that they possessed before, a territory which will be to them the granary that her African provinces on the southern shore of the Mediterranean once were to Rome. The word "protectorate" is a mere figment, already unreal, and one day to be silently abandoned. They have secured in Port Arthur and Dalny, with their fertile Hinterland, the Liaotung Peninsular, the strongest maritime position in the Far East, dominated by a fortress which cost even their army eleven months, and a frightful expenditure of life, to reduce to subjection. They have regained the half of Sakhalin which renders attack on them via Siberia nearly impossible. They have acquired the railway, which, if they are ever again attacked, the assailant must recapture. And they have restored Manchuria to China, thus planting between themselves and their enemy great provinces which within ten years China, strengthened by their guidance, can convert into a mighty barrier against any enemy from the West. And what with their captures, and their rebuildings, and the purchases they can easily make, they have acquired the means of doubling their already powerful Fleet, and will be secure on the water from all menaces not countersigned by the Anglo-Saxon These are great material Powers. advantages; but they are as nothing to the other triumphs they have They, a new Power-for, achieved. though their dynasty is as old as history, they are in this connection a new Power-have beaten back a Power

1500

believed to be the strongest in Europe, have destroyed its fleet, have shattered its armies, and have proved that they can place upon the Asiatic Continent an army of half-a-million men with whom the best general in Europe will hesitate to cross swords. No State can now attack Japan without perceiving that it takes its life in its hand. She is the mistress of the North Pacific, and must for years be the dominant influence at Pekin and the strongest competitor for the trade of China, the last grand undeveloped market in the world. To have risen to such a height in a war of only eighteen months might well content any Power, even if it did not inspire, as we suspect it did inspire, that ancient fear of the Destinies which prevents the wiser sections of mankind from pressing fortune too far. Witte may exult in his hardly decent fashion at what he considers his victory; but it is Japan, not Russia, who has achieved a triumph, consolidated rather than limited by the terms of a peace signed before St. Petersburg has recorded a single victory either by sea or land.

We have said nothing of the effect of the Peace on Europe, but we believe that it may prove entirely beneficial. It will give a check to many dangerous ambitions; encourage France, who needs encouragement; and perhaps extinguish panics, which are almost as injurious as wars, for a generation. Those who regret it, as sure to arrest the movement in Russia towards freedom, are, we conceive, mistaken. Certainly the reactionary party thinks so, for it has steadily urged the Czar not to "submit" to peace. Certainly the bureaucracy thinks so, for they have supported the reactionaries. The Czar will be no stronger at home for a peace which can bring him no glory, and which arrests one of the dreams in which Russians have been ac-

customed to find compensation for their slavery; while Liberals must benefit by the concentration of the national thought upon the necessity for wide reforms. Remember what occurred after the Crimean War. The Peace of Paris was much less mortifying to Russia than the present agreement, and Nicholas I. was the ablest man who for generations had sat on the Russian throne, yet so certain was he of the shock his dynasty had received that he advised his son to avert its effects by emancipating the serfs. The shock will not be less on this occasion, and the Czar-who, remember, is asked, especially by the peasantry, for personal freedom rather than for political power-may well consider that concessions such as partial freedom for the Press, exemption from punishment by administrative order, and a complete remodelling of police methods are an easy price to pay for permanent reconciliation between his people and his dynasty. If he refuses these concessions, the agitation which already menaces the security of property will continue, and the demands of the Duma will either make it a Parliament-in the German sense, at all events, of the word-or compel the Government once more to convert itself into the pure autocracy which the intelligence of Russia has already rejected, and which the peasantry will distrust as unable to give them either land or victory. Besides, although we place little confidence in the idea that General Linevitch's army will return to Europe discontented, believing that its dominant feeling will be gladness at its relief from continuous suffering, it is impossible that the whole Army should not be out of heart at its continuous defeats, the impression of which will not be lessened by the thought that they have remained unavenged. Now an autocracy rests always on the approval of its Army. We

conceive that for years to come the Russian dynasty must strengthen itself by conciliating the people, and the only probable method of conciliation is by steady, though, it may be, slow, concessions intended to cure those methods of government which the people deem tyrannical, to establish, in fact, a régime of law instead of The Spectator.

personal will. The future always remains obscure; but if history is any guide, the future Russia should tend towards a system such as that which in Austria is not detested, though in Austria, as in Russia, a majority of the people are Slavs. A cataclysm like this Russo-Japanese War never leaves things precisely as they were.

THE DEVELOPMENT OF CHARACTER IN FICTION.

I often wonder what the tests are which the man in the street or the ordinary reader applies to fiction. Many people, if you ask them about a book they have been reading, will reply simply that it is "interesting" or "readable," but unless you happen to have a very accurate knowledge of their private equation, the answer does not tell much. A Reading is like every other amusement. The vulgar like it fairly rough and strong, while the more cultivated a man's taste and mind are the more fastidious does he become. What one man will read with a guffaw and laughter strikes another as being so incredible as to be dull and stupid. It were greatly to be desired, then, that some test should be formulated by which criticism could be raised into something more than the mere expression of an opinion-the sort of "I like it" or "I don't like it," to which the critics of the Edinburgh Review complained that their predecessors confined their comment.

Now one of the most interesting features of a novel is, in my opinion, the growth of character that it portrays. We may take it as a rule that the most marked difference between a drama and a novel is that the former, as it were, shows life in a section after a great incision has been made in it, while the best fiction will always show

how circumstances develop and foster character. It is probable that with the unconsciousness which accompanies the highest genius we find most great writers doing this quietly and unostentatiously. To take a very familiar example, Dickens made of Pickwick something very like a ridiculous and pompous fool in the early pages of his book; but gradually, as incident after incident occurs in his life, we find the merely grotesque passing away and a pleasant and lovable character growing up under the skilful hands of the novelist. It has been the same way centuries before with Don Quixote. Cervantes evidently started with the idea of getting little except laughter out of the Don, but unconsciously he ended by painting one of the finest pictures of a gentleman that is known in fiction. His follower, Le Sage, did the same thing with his hero. Gil Blas, at the outset of his career, is one of the most foolishly simple young men that it is possible to conceive, but, as he goes through the mill, the defects of his character gradually wear away and he ends as a wise and sensible citizen.

On a very large scale Goethe attempted this in "Wilhelm Meister," and that book had the effect of stimulating many others to follow the example of its author. Young Benjamin Disraeli, than whom no one had a surer hand on

the pulse of his time, attempted it in his own characteristic way in "Contarini Fleming." It will be remembered by all who take an interest in the meteoric career of the most singular Prime Minister England ever had, that in his early days he was quite sure of his own calling and election to be a poet. Was it not on the "windy plains of Troy" that he exclaimed to himself: "For me remains the revolutionary epic"? And in "Contarini Fleming" he made a fine attempt to realize the poetic character and temperament and develop them through a long chain of interesting circumstances. It was a task worthy of any artist, and it is no shame to Disraeli that he did not achieve a work fitted to take its place among the masterpieces. To me "Contarini Fleming" still remains by far the most interesting of the novels written by Lord Beaconsfield. It has very little of the glitter and glare and general flamboyancy that startled the reader in that long series of books which stretched from "Vivian Grey" to "Endymion;" but just as "Henrietta Temple" was a worthy experiment in one direction so "Contarini Fleming" is an equally worthy experiment in another.

It is surprising how little modern novelists have understood the interest attaching to development of character. Thackeray, for instance, paid little attention to it. His heroes, if you could call them heroes, generally remained at the end exactly what they were at the beginning, as if their creator had really imagined them not as living, moving, breathing human beings, but only as the puppets out of books that he was fond of calling them. "Many a true word is spoken in jest" saith the proverb, and when Thackeray wrote in his own charming and decisive manner about the characters in his novels being puppets, he was really passing the most scathing criticism that could be

made upon himself. He had nearly everything else that makes a great novelist, such as style, invention, knowledge of the world and of life; but that sympathy with growth and evolution and development was a little lacking in him. In saying that, I am quite aware of the fact that he was continually inclined to express a wholesome protest against the sentimentalism that was much too prevalent among the minor writers of his time. They belonged in a large measure to what we may call the Adelphi School; they seemed to think that they had achieved something great when they made their chief villain melt into tears of repentance and change instantaneously in his whole life and character.

Of course it may be said that they had a precedent for that in Shakespeare's treatment of "Prince Hal," but no one can read the inimitable scenes wherein the Prince figures without realizing that all the time Shakespeare was sowing the seed that he meant to be reaped in after years. The future King of England in all his raillery with Falstaff shows with the utmost clearness that he sees his own faults and shortcomings as well as any outsider could; that the germs of reform were in his mind and only wanted favorable circumstances for their germination and development.

I lay stress on the unconsciousness of the artist in this matter, because any one who drew up a design beforehand would be almost certain to go wrong. It is no part of the plot, except in as much as character is always in itself plot. It is unimaginable that any of those I have named should have tried to invent circumstances for the purpose of producing a change that actually took place: rather events carried them off their feet and the end of a work of fiction into which a writer has put all his strength and al! his art becomes inevitable, as it were, of its own

accord. The artist himself eventually loses command of the pen and is compelled to write what the spirit dictates. It need scarcely be said that the opposite course to that I have indicated is also a legitimate one, and might possibly be made more interesting than it ever has been yet. In "Romola" George Eliot tried to show how the character of Tito Melema was degraded and eventually pulverized by the circumstances in which he was placed. Her idea was that even in the most promising period of his youth there was that strain of weakness and vice, which grew and developed until it overshadowed everything else in his character. The design was admirable; but we all know nowadays that the result was to a large extent failure because of inability of a woman's imagination to give a strong and truthful presentment of the male element in life. Why this should be so one does not know; but there is no denying the fact that since the beginning of the world no woman writer has been able to construct strong drama just because this is lacking-as though her power and

sympathy, ready and sweet as it is on the surface, did not really go so deep as a man's, or carry with it the same understanding. Flaubert, in "Madame Bovary," came much nearer to achieving the result he set out in search of, but there is something hard and ungenial in that famous book which might be due either to his own character or to his theories. This quality narrowed his outlook upon life, and it is incredible to us that posterity should regard his work or that of his disciple, Guy de Maupassant, as possessing the importance attributed to it by their contemporaries.

If we have no very recent example to illustrate our meaning, the reason would appear to be that the imaginative writers of to-day (seriously as they take themselves from one, and that the most ridiculous side) do not take their art seriously enough. At any rate, I cannot at the moment call to mind any living writer whose vision of life, as embodied in a work of fiction, has shown how the stress of circumstances evolves or brings into activity what before lay potent but dormant.

A.

The Academy.

THE CHILD AND RELIGION.

SCIENTIFIC METHOD IN RELIGIOUS TRAINING.

The application of the results of recent scientific investigation to matters formerly regarded as subjects of a purely theological treatment is growing apace. The tendencies of the age both speculative and practical have forced us to inquire whether the processes of the religious consciousness as phenomena can be made clearer and more intelligible by a use of the methods of scientific observation and analysis. In the essays before us the result of the same tendencies is seen in a courageous attempt to bring the light of scientific research to bear on the dark problems of religious education. The essays are written by various writers, and the presence of the scientific aim is much more apparent in some than in others. Taken as a whole, however, they are pervaded to a remarkable extent with the scientific spirit. The political question which naturally occurs to one in connection with the theme is not directly dealt with; yet

^{*} The "Child and Religion." Eleven essays edited by Thomas Stephens, B.A. London : Williams and Norgate. 1905. Pp. 371. 6s.

the reader is made to feel that the problem of religious instruction in the school lies behind the discussions.

One should, perhaps, be satisfied that a beginning has been made by warm friends of religious education in accepting the fruits of science, and not disposed to inquire too closely how far the writers satisfy the tests of a specialist, the rank claimed for them by the editor. Yet it is important surely that if science is to be called in by the theologian to assist in this domain of inquiry it should be accorded a fair hearing, and not invited out of mere politeness or deference to reputation, as medical men are sometimes invited to be present at a consultation.

In examining the thoroughness of the application of the scientific method we may take the first essay on "The Child and Heredity," by Professor Jones, of Glasgow. No one would look for a biological essay pure and simple from Professor Jones; and his paper is frankly an interpretation of the evolution of the moral and religious consciousness of the individual in terms of the writer's philosophic idealism, and as such it is full of interesting suggestiveness. One may, indeed, wonder whether ultimate philosophic interpretation is quite so important in connection with a pressing practical problem as the writer thinks-whether the summoning on the scene of the child's inner life of the cold and blankly abstract form of a transcendental Ego will help us much in understanding the directions of that life or the connections between its several stages; yet this part of the essay is worked out with much ability and skill. It is when the thorny biological subject of heredity is dealt with that one begins to feel a certain inadequacy in the treatment. writer rejects the principle of heredity as commonly defined; its fatalism

seems to have terrified him. He seeks a way of escape from the threatening grip of tainted ancestral hands on offspring in Weismann's doctrine of the nontransmission of acquired characters, though in one place he shows us that he does not overlook the element of hopefulness which he is casting away in the idea of a possible transmission of moral improvements gained by individual exertions. The doctrine of Weismann is supposed to give special support to the idea that all which a man becomes was implicitly in him at birth, and indeed in his ancestors, human and pre-human; that "the higher is not determined by the lower, but is the fulfilment of its own promise within it; and the nisus of the whole process is within itself" (p. 63). But biological truths do not frequently lend themselves in this convenient fashion to buttressing some one form of philosophical doctrine. It looks as if Professor Jones had not clearly understood the rival theory of heredity. He writes as if Spencer were not at one with Weismann in bolding that the "potential faculties" of which he speaks are inherited and the principal part of that which is inherited: and as if Weismann did not egually with Spencer and the biologists who share his view accept transmission of some at least of those modifications of the potential faculties which we call the special tendencies or predispositions of a child. Professor Jones, moreover, is hardly fair to the teaching of biology and pyschology when he attacks what he thinks to be a common assumption in that teaching that heredity and environment are opposed and hold alternate sway over human life. No competent person would dispute the truth on which he rightly lays stress, that all life activities imply the interaction of environment and natural powers. the acceptance of this well-established

proposition in no way excludes us from measuring, so far as measurement is here possible, the relative forces of the two in a given case. Just as we can compare the natural degrees of sensibility of two children to sounds by determining the relative forces of the sounds required in the two cases to effect a sensational reaction, so Mr. Galton and others, with less perfect instruments of measurement, are able to show that in the same family one child has less responsiveness than another to the artistic, or to the moral influences of their environment. When the differences in response are large, as when a boy forces his way to some form of art activity amid most discouraging surroundings, or when another boy. environed by all the sheltering and fostering influences of a good home. meets the first suggestion of some form of vicious indulgence with energetic alacrity, we are surely justified in speaking of special inherited or at least congenital tendencies. On the other hand, children who quickly take the color of their fixed surroundings, who have much imitativeness and much docility, are properly described as being in an important sense more the products of their environment.

There is a great attraction for those who care for and wish well to the young generation in the idea that every child brings into the world all the human potentialities, and that it depends on the environment, that is to say on the factor which we can reach and control, as to what powers shall unfold themselves and in what degrees. Yet we cannot blind ourselves to the fact that a harsh and cruel element of tyranny may threaten the life of the individual. All will agree with what Professor Jones says against the crushing fatalism of the older forms of the doctrine of original depravity, in which he is ably supported by another of the writers, Mr. F. R. Tennant, in a noteworthy essay on "The Child and Sin." In many cases, probably in most, there is no such strong natural setting of the currents of passion and volition towards unwholesome lines of activity as, under ordinary safeguards, would constitute a grave moral danger. And this fact justifies a certain hopefulness and cheerful confidence in the moral and religious teacher.

Nor is a special congenital leaning the only possible thwarting element in our educative work. It is surely a curious circumstance that the optimistic creed of Professor Jones, that all children are alike in respect of the grouping of their congenital potentialities-a doctrine which seems to be insisted upon in another essay, that of Professor G. T. Ladd on "The Child's Capacity for Religion"-is confronted in the same volume with a very different kind of study, an essay on "The Child and its Environment," by Mr. C. F. G. Masterman. This is a stern inquiry into the effects of that transformation of the environment of children which is being effected by the crowding of population into big cities. The substitution of the congested street for the open spaces of the fields is here shown to be opposing serious obstacles to current modes of instruction, including Bible teaching, which deal largely with facts and images drawn from the country, A second and possibly more disquieting result, adds the essayist, is the loss of moral quiet, the introduction of an unrest begotten of life in a crowd, and the too rapid burning of the fires of nervous and spiritual energy. A third and equally serious result insisted on is "the disintegrating force" which the environment "is continually beating down upon the family life." Masterman discusses the question of possible remedies, but appears to re-

main in the end by no means relieved from anxlety. One cannot but fear lest in this new type of young human life, with its over-stimulation of brain, its dissipating effect on the intellectual and moral energies alike, its emptiness of a sense of home, there may lurk another sort of tyranny, that of the earliest and most potent of the environments. We may hold with Professor Jones, who for once agrees, in substance at any rate, with J. S. Mill, that character is not made by circumstances. Yet who that has observed on any larger scale how children's minds and character form themselves can fail to recognize that the introduction of these agencies, while it may further certain directions of development, is directly unfavorable to much that we have prized most highly among human qualities?

To a lover and student of children this volume of essays will appear to be incomplete in its under valuation of the variability of child nature. One of the most valuable results of the recent statistical inquiries into children's ideas and habits has been the bringing into clearer light the numerous and often wide differences among their ideas of objects, of the earth, the sky, and the rest. Now, religious teaching may be said in a very special manner to be individualized by every mind that assimilates it. The very little that we know, and perhaps, ever shall know, about the thoughts and feelings of children leads us to conjecture that they have a surprising way of coloring the facts and truths of religion with The Speaker.

their individual experience and habits of thought, and with their specific emotional atmospheres. It seems strange that a book on The Child and Religion should not have dwelt at some length on so vital a matter as this. When, for example, Dr. Horton in his interesting paper on "The Religious Training of Children in the Free Churches" claims for the Bible that it is "in a very curious sense children's book," he might have touched on some of the trouble of the eager groping young spirits in bringing "sense" into what they learn and read.

One word on the large assumption running through the volume that all children are naturally capable of religion. Against so sweeping a proposition science would probably have something to say; for even that sympathetic psychologist Professor William James concedes, or rather urges, that deep and fervid piety is connected with a particular kind of temperament. One looks in a work like the present for a recognition of the possibility that religion as a state or attitude of the soul may vary greatly, and may now and again refuse to adapt itself to the mould with which we would impress form on it. The recognition of such a possibility should not be difficult in these days; and had it been frankly avowed it would probably have relieved what on the whole is a largeminded book of one or two passages which will be apt to strike some readers as savoring of intolerance.

James Sully.

IS ANY ANIMAL GREEDIER THAN MAN?

So commonly are persons of large appetite upbraided as hogs, gluttons, or

gests itself: are these illustrations accurate, or must they be accepted by cormorants, that the question sug-naturalists with the same qualification

that belongs to such comparisons as "silly as a goose," "blind as a bat," "timid as a hare," and many others equally popular in every-day talk? Those who have studied such creatures know that geese often display undeniable cunning, that bats, though endowed with senses of which we have no equivalent, are not blind, and that hares can at times be most pugnacious. From the general contemplation of whether these and other animals so described are greedy out of the common run, it is but a step to the problem whether any living beast or bird, reptile, fish, or insect, is actually greedier than the greediest man. Obviously, it is fair in such a comparison to take the case of the man who can and does eat more than his fellows-because such a man, disagreeable though he may be from one standpoint, is undeniably more natural than those who, bowing to the verdict of their medical attendant, or restrained by considerations of polite behavior, habitually eat less than they could if they were to continue eating till unable to swallow more.

The whole system of feeding in our artificial lives is quite distinct from that adopted in the rest of the animal world, and doubtless also from that which was in vogue with the cave-men. Able by various devices to procure our food as required, we have appointed certain feeding-times, and at these we rigidly take our mealsbreakfast, luncheon, and dinner. the intervals, if we are wise, we neither eat nor drink; but, whether we are hungry or not, we sit down to these fixed meals with precise regularity. The wild creatures of nature know no such restraint. The birds in our garden are always pecking at the lawn for worms or at the boughs for ber-The lethargic cattle in the meads, when not actually grazing, are ruminating, which is grazing over again. The caterpillars on our rose-

trees, the ants in our store-room, are always at table. Only civilized man and his domestic animals know the formality of meal-times. And so it is throughout Nature with all the fourfooted and winged creatures. Only the reptiles are known to abstain for long periods, sometimes from choice, at others by compulsion; and, so far as they can be kept under observation, tishes are supposed to display similar irregularity in their appetite for food, their caprices being well known to anglers, who say either that they are "biting madly," or else "off the feed."

In considering the appetites and tastes of man and the lower animals, it is of importance to distinguish in every class between the gluttons (the word is used conventionally and without prejudice) and the epicures-more happily differentiated by the French as gourmands and gourmets, the former of which prefer quantity, while the latter are all for the quality of their food. The human race furnishes innumerable examples of both. Haydn, the composer, would sometimes order six covers for dinner and dine alone. One king of England died after a surfeit of lampreys; the undoing of another was an excessive meal of peaches and new ale. With these may be ranked Sporeogambi, a human hog, who ate two thousand yards of macaroni at a sitting; and Domery, the Pole, who, in the presence of witnesses, devoured in one morning a stone of raw beef and almost the same weight of tallow candles. These are the gluttons; and if we compare Domery's feat with the daily meal of a full-grown working elephant weighing five or six tonsnamely, one hundred and thirty pounds of vegetable food-we find the man the greedier of the two. The epicures are less repulsive. A former Duke of Portland, who paid high prices for red mullet and ate only the livers, was a benefactor of trade; and the famous

Comte de Broussin, who despised mushrooms unless their flavor had been brought out by his mule treading on them, likewise entertained in princely style, and made an art of eating. Every class of animals has its examples of these two categories. With the epicures we may class the giraffe, with the gormandizers the vulture. The following selection will approximately serve to illustrate by more or less familiar animal types the two classes, though there is some little overlapping which can presently be indicated.

GLUTTONS.	E	PICURES.
Mole.	§ G	iraffe.
Boar.	† A:	ard-wolf.
Bear.	* A:	nt-eater.
Hyæna.	* SI	perm-whale.
Killer-whale.	§ M	anatee.
Hornbills.	* Os	sprey.
Vulture.	§* H	umming-birds.
Cormorant.	§* G1	rey millet.
Seagull.	§* Be	es and Wasps.
Pythons.		
Sharks.		
Sandhopper.		
Burying beetle		
Living food. †	Carrion. §	Vegetarian.
	Mole. Boar. Bear. Hyæna. Killer-whale. Hornbills. Vulture. Cormorant. Seagull. Pythons. Sharks. Sandhopper. Burying beetle	Mole. § G Boar. † A Bear. * A Hyæna. * S Killer-whale. § M Hornbills. * O Vulture. § H Cormorant. § G Seagull. § Be Pythons. Sharks. Sandhopper. Burying beetle.

It has been admitted that the subdivision herein suggested is not free from compromise, and, in fact, eclecticism is not unknown in the large eat-The mole, for instance, devours great quantities of worms, but it eats little else. The killer-whale, though so greedy that one of sixteen feet has been known to choke over a seal, having at the time in its stomach fourteen other seals and thirteen porpoises, is a connoisseur in the matter of other whales' tongues. Even the wild boar, which is not by far so gross a feeder as its degenerate cousin of the sty. has no equal as a hunter of truffles.

It must also be remembered that the man who eats immense meals lacks the excuse of these heavier feeders in the wild life. The mole, the vulture,

the python and the shark have excellent reason for eating all they can when a rare chance offers. They may have gone long without a meal, and there is no instinct to tell them when they will get another; whereas a man knows quite well at luncheon that within six or seven hours he will be dining. The mole, like the little shield tailed snakes of Ceylon, which hunt the same food, has to work like a slave, digging and tunnelling and undermining acres of surface soil in its pursuit of the worms, and all this labor must breed a hearty appetite. The vulture and the python are so sluggish in their movements that the latter, more particularly, lacking the bird's taste for carrion, must often be compelled to go hungry for weeks together. The shark is a mighty swimmer, but then the ocean is a vast hunting-ground, and it may cover miles of water before finding food to its taste.

Again, while greediness is a term of reproach among ourselves, it is impossible to glance down the table in the preceding column with the same feeling of distaste, for we know that some of the greediest among these are Nature's appointed agents for the resolution of matter, which otherwise would taint the atmosphere and poison mankind, into its harmless elements. beneficent scavenging done by the hyæna, vulture, seagull, shark, buryingbeetle and sandhopper is an essential condition of this globe remaining habitable by ourselves; so that a man need never destroy any of these, with the possible exception of the shark, since he owes the humblest of them thanks that the earth is so fair a heritage.

There are other considerations which distinguish the greed of the lower animals from the greed of man. In the case of the great pythons, for instance, and, in fact, of all serpents, more or less, the teeth are so situated in the jaw that the reptile is bound to eat all

there is, and is debarred from leaving off when its victim is only half-de-Some years ago one of the largest serpents in the Zoological Gardens ate another, almost as large, which had previously shared its compartment. Much was said and written at the time of the offensive "greediness" of the creature; but, in point of fact, its inclination had less to say to the result than its anatomy. instance, the two started on the same rabbit, one seizing the head, the other the stern, the larger would have no choice, when they met half-way across, but to swallow its smaller fellow. Neither of the specimens in question were ophicphagous by nature, though the Indian hamadryad, among others, eats nothing but snakes of other species.

The smaller serpents, so far from being greedy, include some of the most fastidious animals in the Zoo. One will eat only birds' eggs; another only frogs; a third must have lizards; a fourth declines everything but rats; and most kinds would starve rather than be tempted by the wrong food. Fortunately, these cold-blooded creatures can go a long time without a meal, and I have known a captive python, apparently in excellent health. last nearly two years without feeding.

Nor are the lizards less discriminatting. As a general rule, those of the East are flesh-eaters, those of the West vegetarians. The extraordinary tuatera (Hatteria) of New Zealand, which recent visitors to the Reptile House may pardonably have taken for just an ordinary foreign lizard, is one of the As a matter of fact, it is flesh-eaters. more interesting than any living lizard, for it is a kind of living truant from the palæontological department South Kensington, a stray and isolated survivor from prehistoric ages-not, indeed, strictly speaking, a lizard at all. It feeds with relish on the oily nest-

lings of the sea-birds, whose burrows it shares in the cliffs of Stephen's Island, one of its few known haunts. And it has the cunning bred of a long Not without scheming has ancestry. it held its own in the struggle for ex-Conceiving a istence all these æons. system of retribution, in which the bereft fowl should retaliate on its own helpless young, the tuatera deposits its precious eggs in a separate hidingplace, covering them with leaves and earth, and then returns with a clear conscience to feed on its host's family. No wonder that a race endowed with so much savoir vivre has refused the extinction reserved for its contemporaries!

The chameleon, another lizard-like animal, is another fastidious feeder, its remarkable tongue being shot out only at certain insects that alight within the A captive chameleon. danger zone. which I knew in Devon, and which in its wilder youth had shambled out of the way of many a cavalcade over the sandy tracts of southern Morocco, ate any kind of fly, but was indifferent to worms and afraid of spiders. Its owner set an ingenious trap for the flies by hanging a lump of sugar within range, and the chameleon entered thoroughly into the spirit of the plot, for no fly was ever required to alight twice.

The more highly organized animals, four-footed or feathered, of this world, include few types so fastidious as these humble reptiles. The giraffe and aardwolf among the former, and the humming-birds and divers among the latter, are the most satisfactory instances. The giraffe in a wild state strips acacias and other trees of their leaves-a form of browsing to which its immense stature and long and muscular tongue are admirably adapted. In menageries, being a costly and delicate animal, it has to be humored with regular meals of best clover hay, and it shows unmistakable appreciation of such

dainties as an onion, or a lump of sugar. The apple is one of its favorite fruits in captivity, and a story used to be current at Regent's Park (though I never saw it put to the test), that, though very partial to apples, nothing would induce the dainty giraffe to eat one out of which its keeper (possibly with tobacco-stained teeth) had first bitten a piece. Why, in view of the animal's fastidious ways, the authorities post notices in the house, requesting visitors not to feed them, requires explanation. Possibly, captivity broadens the giraffe's views, and, as it is not a creature of very high brainpower, it might be induced to eat something that would disagree with its digestion.

The natural food of the aard-vark has not I think, been minutely described by African naturalists, but in the captive state its appetite appears to require the stimulus of a varied menu, else the Superintendent would scarcely sanction a change from day to day—raw meat or cooked, a pigeon, or a fowl's head with the blood left in, being the favorite dishes.

The humming-birds of the Andes region, which have been so graphically described by Wallace and Bates, have their several preferences for some particular flower or insect, and one species rarely if ever takes the food of another.

The diving-birds, which have long been the only interesting occupants of the Fish House at Regent's Park, will eat nothing but living fishes, bushels of which have to be netted for the purpose. Certainly, the evolutions of these plunging fowl, as, clad in a silvery armor of airbubbles, they twist and double after their terrified prey, like greyhounds coursing a hare, are among the most beautiful sights in the Gardens, contrasting in every way with the gross tearing of raw flesh and crunching of bones that so many people crowd to see in the Lion House.

Possibly, the secret of this charm of the lions' feeding-hour may be traced to some such psychological process as induced a learned divine to exclaim, when he saw a man going to the dogs: "There, but for the grace of God, goes John Bunyan!"

On the whole, the omnivorous animals in Nature are slightly more familiar than those of more eclectic views. In town and country, we have the rats and mice, which must continually gnaw something in order to file down their ever-growing front teeth. Country folk are everywhere familiar with the cawing rooks, which benefit the farmer by eating moths and weeds, and then outrage the keeper by devouring young pheasants and sucking the eggs. The screaming jay is another trimmer between the pleasures of birds' eggs and the quieter joys of a meal of nuts. Taken as a group, the hornbills are the greediest and least discriminating of all the feathered race. Between them, though each species may have its preference, they devour quadrupeds, other birds, snakes, lizards, fishes, scorpions, and fruit. Yet, with some little allowance for difference of tastes, even this menu pales before that of an ordinary civic banquet.

Originally it would seem that Nature designed every animal for its own particular food. In the one case of the New Zealand huia-bird, provision was even made for a very beautiful and interesting division of labor between the sexes; for the male prises open the cleft in the hard bark with his short, chisel-like beak, while the female then uses her curved and slender bill, like a long-handled pickle-fork, to fetch out the burrowing grub.

Certain animals, indeed, are inseparably associated with certain methods of feeding, and we speak instinctively of grazing cattle, browsing goats, bees sipping nectar, owls swooping on mice. We know that the wandering cuckoo prefers hairy caterpillars, that the sperm whale resorts to the warm waters of the Gulf Stream to gorge on cuttle-fish, and that the human-looking orang swings from branch to branch of the durian tree in quest of the ripening fruit. The knowledge of the ruinous locusts, moving in clouds which shut out the sun, to devastate the Arabs' crops, is as familiar as that of the great owls and smaller birds of prey following the periodic march of lemmings from the mountains to the sea.

Here and there, too, we know of strange perversions of appetite. These are indirectly the work of man. In one region a parrot, by nature a vegetarian, learns a fondness for mutton; in another, a baboon, likewise meant to eat only fruit, acquires a taste for cows' milk. Cats are known to eat artichokes and olives, and a horse occasionally devours a partridge. specialized are some animals in their food that even the two sexes have different views on the subject of what to have for dinner. As a curious contrast to the collaboration of the male and female huia may be cited that of the male mosquito, which sucks only the juices of plants, while the female must feed on the blood of animals. The nursery rhyme touching the divergent appetites of Jack Sprat and his wife is totally eclipsed by such disagreement.

Another interesting condition bearing on the nature or quantity of food eaten by some animals is that in which every season brings abundance of one kind only, which then becomes Hobson's choice. There are seagulls in Shetland which can procure fish in winter only. In the summer months they have to eat grain. The nuthatch, which eats insects by preference all the summer, must be satisfied with nuts in winter. It is not, perhaps, too fantastical to compare with this sum-

mer and winter regimen the various foodstuffs of life's seasons. Thus, while the adult may eat or drink almost anything, milk is the sole nourishment of his extreme infancy. The full-grown sparrow may be the bane of the farmer and the plague of the gardener; but the nestling benefits both, since it has an insatiable appetite for grubs. The silkworm must be dieted on lettuce or mulberry leaves, but the perfect moth need eat nothing whatever.

From this outline of a few aspects of animals at their meals, we may revert, in conclusion, to the question propounded at the head of this article. In truth, it is a question impossible of answer, since only in respect of our domestic animals, and not, indeed, in every case with them, have we any means of ascertaining the precise weight of food consumed. Even the capacity of sheep and cattle at grass is an unknown quantity, while the case of animals in zoological gardens has no bearing on the subject, for the rations are more or less arbitrary, and few of the larger creatures are given as much as they could eat. If the lions and tigers were fed to their full capacity, it may be doubted whether iron bars would hold

It is admissable that tigers or vultures may eat more at a meal, in proportion to their own weight, than men. Against this apparent balance in their favor, however, we must set, not only the extreme irregularity of the repasts, but, at least in the case of the tiger, the stimulating exercise that commonly precedes a feed. Now and again, no doubt, a man-eater may succeed in felling and dragging away a native woodman without anything to speak of in the way of effort, but a very different price for some of the tiger's banquets is fixed by the long and fruitless pursuit of nimble antelopes, or by

many a dangerous and exhausting combat with buffalo or rhinoceros.

Touching the irregularity which many of the lower animals take their food, a word must be said on the habit of hibernation, a suspension of vital functions with the aid of which some creatures are able to sleep through a hard winter or some other uncongenial condition of climate. In the ordinary way, the ability of an animal to fast without inconvenience is in inverse ratio to the temperature of the blood. Snakes and fishes are among the longest abstainers, compensating themselves by eating a huge meal when at length they have the opportunity. The lethargic crocodile, dozing for weeks in the muddy backwaters where it has its home, will of a sudden wake up and devour a dead A small snake has been actually known to swallow a hare of twice its own weight. Even in captivity, smooth-clawed frogs in their tank will cram so much raw meat into

Pall Mall Magazine.

their stomachs as to make them float helpless at the surface. A shark may prowl about the ocean for days in search of a meal, and then, encountering a shoal of smaller fish, it may consume half its own weight in an hour or two. The instinct of all these coldblooded creatures is to make hay while the sun shines. From this temporary abstinence, however, in the absence of food, the faculty of complete hibernation is quite distinct. Its interest in connection with the subject under notice lies in the French saying, Qui dort dine. Our dormouse, for instance, is able to fall asleep on the approach of winter and then wake up on the return of spring, thinner indeed, but otherwise sound in body and limb.

I find myself, then, in the unequivocal position of having propounded a question which I am wholly unable to answer. A few general facts, such as those set down in the preceding pages, are the only contribution that I can offer towards its elucidation.

F. G. Aflalo.

BOOKS AND AUTHORS.

M. Georges Pellissier, a professor at the Paris University, boldly insists, in the pages of the Revue (the old Revue des Revues), on the suppression of the French Académie. His article is entitled "Quelques Vérités sur l'Académie," and he complains that the "Compagnie" is essentially and hopelessly conservative, and entirely opposed to new movements. It fought against Boileau, Chateaubriand, Victor Hugo, Flaubert, the De Goncourts, and Zola, and against "romantisme" and "réalisme"-all in vain. M. Pellissier points out that many of the former academicians are now entirely forgotten.

The Athenæum announces the early publication of a volume likely to have considerable importance as an historical document. It contains the memoirs of the late Dr. Thomas W. Evans, an American Court Dentist to Napoleon III. Dr. Evans enjoyed intimate relations with the Emperor, and the impression which he gives of his character-an estimate very different from the conventional one-is based upon close observation during many years and in very varied circumstances. Several chapters of this work relate how the Empress Eugénie, on her flight from the Tuileries after Sedan, sought

refuge in Dr. Evans's house, and how her secret flight to England was made in his charge. The volume has been edited by Dr. Evans's friend, Dr. Edward A. Crane.

A tablet is to be placed on the house which Charles Lamb inhabited in Colebrook Row, Islington. "I have a cottage in Colebrook Row, Islington," he writes to Southey in 1823, "a cottage, for it is detached; a white house with six good rooms; the New River (rather elderly by this time) runs (if a moderate walking pace can be so termed) close to the foot of the house, and behind is a spacious garden with vines (I assure you) pears, strawberries, parsnips, leeks, carrots, cabbages, to delight the heart of old Alcinous. You enter without passage into a cheerful dining-room, all studded over and rough with old books, and above is a lightsome drawing-room, three windows, full of choice prints. I feel like a great lord, never having had a house before." It was at this house that the family was enlarged by the arrival of the orphan Emma Isola, who eventually became, as it were, an adopted daughter of the Lambs; and it was during his residence here that Charles Lamb sent in his resignation to the directors of the East India Company, who rewarded his long and faithful service with a yearly pension of about £400.

An English paper prints a specimen of a literary game called "medleys" popular half a century ago, which consisted of taking one short line apiece from a number of poets and so fitting them together as to rhyme and make sense. Here is one verse of several reprinted:

Ask what is human life! the sage replies,

Wealth, pomp, and honor are but empty toys; We trudge, we travel, but from pain to pain.

Weak, timid landsmen on life's stormy main;

We only toll who are the first of things, From labor health, from health contentment springs;

Fame runs before us as the morning star,

How little do we know that which we are:

Let none then here his certain knowledge boast

Of fleeting joys too certain to be lost; For over all there hangs a cloud of fear,

All is but change and separation here.

The poets are, in their order, Cowper, Ferguson, Quarles, Burns, Tennyson, Beattie, Dryden, Byron, Pomfret, Waller, Hood, and Steele. A diversion like this might be a profitable substitute for bridge.

The modern habit of pleasure travel has produced a literature of its own and we learn how very modern both the habit and its literature are when we are reminded that the date of the first Murray is 1836, and though Baedeker had produced a kind of guide to the Rhine a few years earlier, the Baedeker series is, on the whole, later than the Murray series. In fact, Baedeker's "Holland and Belgium," published in 1839, makes profuse acknowledgments to "the most excellent guidebook ever published, 'Murray's Handbook for Travellers,' which has served as the foundation for Baedeker's little book." The work was compiled by the Mr. Murray of the period as the result of a tour undertaken by him, in his twenty-first year, at a time when there were no railroads. The only guidebooks worthy of the name then in existence were Ebel for Switzerland, Boyce for Belgium, and Mrs. Starke for Italy.

The Athenæum remarks that the recent appointment of Mr. Wilfrid Ward

as the biographer of Cardinal Newman was a foregone conclusion and it has now followed on the recent death of Father Neville, the Cardinal's literary executor, who during fifteen years of procrastinations and scruples never could make up his mind, to put the work definitely in hand. Mr. Ward, as the biographer of his father, Newman's Ultramontane antagonist, has the subject at his fingers' ends, and a good deal of material for the Newman book has already accumulated. Some three or four years are likely, however, to elapse before the completed manuscript is made over to Messrs. Longman.

Some interesting features are promised for a new edition of "The Poems of William Cowper," edited by Mr. J. C. Bailey, which Messrs. Methuen have in preparation. At least one new poem is included, while others will appear for the first time in a collected edition of the poet's work; the introduction will include more than twenty unpublished letters by Cowper, and among the illustrations will be two unpublished designs by William Blakethe only remaining portion of a small series of illustrations to Cowper which Blake did for a relation of the poet's. The poems themselves will be arranged for the first time, as far as possible, in chronological order, with the exception of those printed by Cowper himself, which are given as he issued them.

Several interesting historical works are on the lists of London publishers, for publication this autumn. Col. W. G. Maxwell, the continental correspondent of several London journals. has had a "History of the Pyrenees," based on original records, on hand for some time, which Messrs. Blackwood are to publish. Mr. W. J. Hay will publish a new edition of Home's "His-

tory of the Rebellion of 1745." The author was a volunteer in a royal corps raised to repel the attack of the Chevalier, but as his history was written in later life, and submitted to the inspection of the reigning family, it proved a more sketchy outline than might have been expected. covery of the original MS. will make this edition a great deal fuller than that of 1802. The work is edited by Mr. G. H. S. Beveridge, who has also written a history of the Sobieski Stuarts, which is not yet published. Another work in progress is a history of the Rosenbery family, by Mr. J. Macbeth Forbes, an Edinburgh banker, author of "Jacobite Gleanings from State Manuscripts."

The London County Council is engaged in the praiseworthy enterprise of placing tablets on houses which have personal or historical associations. A pamphlet is published at intervals noting the progress of the work, under the title "Indication of Houses of Historical Interest in London." The latest number records the placing of tablets on the following houses:

14 York Place, Portman Square, where William Pitt and his eccentric niece Lady Hester Stanhope lived for a short time; 12 Clarges Street, the house where Edmund Kean lived in the days of his prosperity; and 48 Welbeck Street, the home of Thomas Young, physician, physicist and Egyptologist. The pamphlet tells us that it was in Clarges Street that Kean received the memorable morning call from Mrs. Garrick after a "spiteful notice of his Othello had appeared in one of the newspapers," when, learning the cause of his irritation, the widow of the dead actor turned to Mrs. Kean and said: "My dear, he should do as David did, and he would be spared this annoyance-write the articles himself. David always did so."